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If We Build It, Will They Come?: Testing the Theory of Planned Behavior as a Predictive Model For Use in Determining How Career Counseling Centers Can Better Promote Their Facilities and Services

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ABSTRACT

If We Build It, Will They Come?:
Testing the Theory of Planned Behavior as a Predictive Model For Use in Determining How Career Counseling Centers Can Better Promote Their Facilities and Services

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Many students resist planning for the futures, and university career counseling centers sit underutilized across the country. It is proposed that it is in part up to educators, career counselors and the public relations practitioners who work for university career counseling centers to convince and encourage students to seek career counseling help when they need it. The question is, however, how can this most effectively be done?

This study tested the usefulness of the Theory of Planned Behavior as a predictive model clarifying what factors impact a student's decision to seek career counseling.

Higher education in the United States has become a more than $165 billion industry. There are approximately 13 million undergraduate students enrolled in more than 3,600 colleges and universities across the country, and enrollment is expected to increase to 16 million by the year 2002 (Simpson & Frost, 1993; Karabell, 1998; Kruckeberg, 1995). This figure may be a conservative one, when current events such as Clinton's higher education initiative are taken into account. In 1997, Clinton pledged "to make the thirteenth and fourteenth years of education -- at least two years of college -- just as universal in America by the twenty-first century as a high school education is today" (Haworth, 1997). Increasingly, college is being seen as an American birthright, and students are responding to the call (Karabell, 1998; Matthews, 1997; Sacks, 1996). College is seen more as an assumption than a choice, and because of this, today's students are arguably different than students of past generations (Ringer, 1999; Matthews, 1997; Sacks, 1996). What remains the same, however, is their need to figure out a plan -- an academic plan for their college years and a career plan for their futures.

Yet many students resist planning for the futures, and university career counseling centers sit underutilized across the country. Research has shown that there is a direct correlation between student satisfaction with their college experience and having a career plan while enrolled (Tan, 1992). Research has also shown that students, who seek career counseling help when they need it, feel more empowered and prepared (Crockett & Crawford, 1989). However, many students do not take advantage of what career counselors offer, for a myriad of reasons (Gordon, 1984). Therefore, it can be proposed that it is in part up to educators, career counselors and the public relations practitioners who work for university career counseling centers to convince and encourage students to seek career counseling help when they need it. The question is, however, how can this most effectively be done, as budgetary and time concerns loom large on most campuses.

In an effort to increase the base of knowledge that educators are armed with, this study tested the usefulness of the Theory of Planned Behavior (Ajzen, 1985), an expectancy-value model, as a predictive model clarifying what factors impact a student's decision to seek career counseling. The TOPB uses the variables of attitude, subjective norms, and perceived behavioral control to predict behavioral intention, and in turn, behavioral intention is used as direct predictor of behavior. Once it is determined which of these variables affect students, mass media campaigns can be developed for maximum effectiveness.

The TOPB suggests that people will behave as they intend to behave, as long as the behavior will allow them to obtain favorable outcomes and the behavior meets the expectations of others who are important to them. Because it is generally thought that the process of selecting a career is one that ends with a favorable outcome, and that both parents and peers weigh heavily in the way young adults make decisions, it is thought that applying the question of why student seek or do not seek career counseling to the TOPB may allow educators to make more accurate predictions of student career counseling behavior.

Literature Review

Indecision about selecting a career is detrimental to both students and institutions of higher education (for example, Chase and Keene, 1981; Gordon, 1984). Often, the discussion of the problem -- or problems, as the case may be -- includes the impact and effect of career guidance and career counseling. Isaacson and Brown (1993) cite the following statistics: Only approximately 60 percent of college graduates report being in their present career as a result of following a conscious plan. Of those adults who either did not finish college or attended a two-year institution, about 43 percent followed a conscious plan into their current careers. Approximately 15 to 20 percent of those who attended some form of post-secondary education had never used any occupational information. Nearly 60 percent of college graduates would try to get more information about careers if they could start over, and only about 55 percent of those who graduated from college or received some college training feel that their skills are being well used in their current jobs. Additionally, Johnston and Packer (1987) propose that while it is expected that the number of jobs requiring a college degree will increase in the next few years, there will be increasing unemployment and underemployment among college graduates because of an oversupply and because of a mismatch between the education received by graduates and the demands of the work force.

Career guidance and counseling can help to improve these statistics. Shertzer and Stone (1980) define guidance in this way:

> As an education construct, [guidance] refers to the provision of experiences that help pupils to understand themselves; and as a program, it refers to procedures and processes organized to achieve certain educational and personal goals. .

> .Guidance is the process of helping individuals to understand themselves and their world. (p.12)

In order to make a career choice, a student must go through a decision-making process. According to Pietrofesa and Splete (1975), this decision-making process occurs throughout one's career development and is affected by several factors, primarily understanding the process, self-knowledge, occupational knowledge, experience, and vocational maturity. Of these aspects, all can be affected in a positive way by career counseling.

Often the first obstacle to overcome, "understanding the process," can be the most difficult. Pietrofesa and Splete (1975) note that "many people are unable or unwilling to involve themselves in making decisions because they do not wish to take the risk involved. They are unable to see that making a choice can be within their control and that it can be a learning experience that is beneficial rather than constricting or harmful" (p.104). Counselors can help the student learn about him- or herself and about different occupational opportunities. Good counselors have been trained professionally and should be able to provide both information and empathy to the undecided student.

However, no matter how well trained the counselors may be, students often have to make the first contact. They must be willing and able to take the steps to contact the counselor and take the time to meet them. Statistics show that many students are not partaking of available resources. For example, the University of Florida's Career Resource Center Annual Report 1997-1998 stated that only 4,238 students of the more than 40,000 students enrolled at UF received individual counseling. Another 12,439 students attended career workshops, classroom presentations, student organization presentations, and/or special events. However, it is not known if these are the same students who participated in the events over and over or if all are different students entirely. Even assuming they are different students, the percentage of the overall student population who took an active role in seeking out information and used these resources still is only approximately 32 percent. It is reported that approximately 45 percent of the students who visited career resource counselors are undecided about their majors, and an additional 15 to 20 percent who reported having recently changed their majors came in to use the library facilities or attend a career workshop.

Without proper guidance and support, students may fail to achieve their potential, and the ramifications of this "failure" affect more than the individual student. Families, peers, teachers, and entire universities are all affected by this process.

With this in mind, educators spend considerable time encouraging students to seek career counseling. But there is a large degree of uncertainty. Do students seek career counseling when they need it? Why do they choose not to go when they need it? What makes a student take that extra step and seek help? Can we predict whether they are likely to go or not, and therefore, can we recognize which students need extra and different measures to help them take a more active role in their educational and career decision-making processes? And, most important to this study, when we know the answers to these questions, can educators and public relations practitioners develop effective mass communication campaigns that encourage students to seek career advising?

A Theory of Reasoned Action

Since the early 1900s, when researchers began investigating the relationship between attitudes and behaviors, a number of theories have been proposed to give a framework that would help provide both correlation and predictive information. One such theory, the theory of reasoned action (Fishbein, 1967; Fishbein & Ajzen, 1975), proposed that an individual's behavior is immediately determined by the intention to behave in a certain way, and that this intention is, in turn, influenced by that individual's attitude toward the behavior and the individual's perception of the social pressure put on him or her to perform the behavior (Fishbein & Ajzen, 1980) (See Figure 1). Intentions represent a person's motivation to follow a conscious plan to try to perform a certain behavior. The stronger an individual's intentions, the more the individual is expected to try, and thus the greater likelihood that the behavior actually will be performed. For example, if a student says that he or she is very motivated to seek career help from a counselor, then it is thought that he or she will attempt to make the appropriate arrangements (ie. an appointment) to see the counselor. In general, the attitude toward performing the behavior is assessed using a traditional measure of attitude (such as the semantic differential). The perception of social pressure, otherwise known as the subjective norm, is assessed through items that ask if important others (called referents) think a particular behavior should be performed (Fishbein & Stasson, 1990).

The attitude toward performing the behavior and the perception of subjective norms can be predicted from behavioral beliefs, evaluations, normative beliefs, and motivations to comply (see Figure 1). As defined by Fishbein and Stasson (1990),

> behavioral beliefs refer to the perceived likelihood that the behavior will lead to certain outcomes; evaluations refer to the extent to which these outcomes are judged to be positive or negative; normative beliefs consist of the likelihood that a particular referent thinks one should or should not perform the behavior in question; and motivations to comply refer to the extent to which one wants to comply with the referent in question. Therefore, to obtain an estimate of attitude, belief strength is multiplied by outcome evaluation and the resulting products are summed across all salient beliefs. (p. 174)

Subjective norms are calculated by multiplying the strength of each normative belief with the person's motivation to comply with the referent in question, and then summing the resulting products across all salient referents (Ajzen & Madden, 1986) (see Figure 1).

FIGURE 1 ABOUT HERE

Fishbein and Ajzen (1975; 1980) propose that other variables that had been suggested in the past to contribute to behavior, such as age, educational level, past behavior, and sex, are external to the model and are assumed to influence intentions to the extent that they affect either attitudes or subjective norms. They state, "the theory's validity depends not on support for hypotheses concerning the effects of external variables but on empirical support for the relationships put forth in the model" (Fishbein & Azjen, 1980, p.9) Specifically, they are referring to the relationships between attitude toward the behavior and subjective norms, the relative importance of attitudinal and normative considerations, intention, and behavior.

Application of the Theory of Reasoned Action

The application of the theory of reasoned action (TORA) to a wide variety of behavioral outcomes has met with considerable success. Dozens of studies have been conducted over the past 20 years, in both experimental and naturalistic settings, examining both the correlations between the variables in the model and its ability to explain behaviors, as well as the predictive value of the model's application to certain behaviors. For example, TORA has been applied to weight loss (Sejwacz, Ajzen, & Fishbein, 1980), family planning behaviors (Fishbein, Jaccard, Davidson, Ajzen, & Loken, 1980a; Vinokur-Kaplan, 1978), reinlisting in the military (Shtilerman, 1982), smoking marijuana (Ajzen, Timko, & White, 1982), voting behavior (Fishbein, Ajzen, & Hinkle, 1980), having an abortion (Smetana & Adler, 1980), attendance at an employee training session (Fishbein & Stasson, 1990), and changing the behavior of alcoholics (Fishbein, Ajzen, & McArdle, 1980). In educational contexts, TORA has been used successfully to explain and predict student intentions to study science or enroll in science courses (Stead, 1985; Koballa, 1988; Norman & Tedeschi), and elementary school teachers' intentions to teach science using hands-on activities (Koballa, 1986).

Three studies have applied TORA to career decision-making processes with success. Sperber, Fishbein, & Azjen (1980) conducted a study investigating the factors underlying women's occupational choices, specifically whether they desired and planned to be homemakers or to work professionally outside the home. Their sample consisted of 111 high school women, and each student was given a carefully formulated questionnaire designed to determine what variables would predict a woman's decision to become a homemaker or to pursue a career outside the home. The results supported the hypothesis that the intentions of these women to pursue either lifestyle depended on the difference between their desires to attain each of the lifestyles. The stronger their intention to pursue one of the lifestyles, the more likely they were to select that lifestyle when given a choice. The intentions were found to be predicted by attitudes and subjective norms. Interestingly, the researchers point out that this study is a good example of how external variables are unnecessary for prediction and explanation of women's career choice when using TORA. Specifically, their results are inconsistent with the commonly held belief that personalities, interests, and needs will affect a woman's career choice (when deciding between homemaking and a career outside the home). Whereas conventional explanations say that a career-oriented woman will value different things in life than a homemaking-oriented woman, the researchers found no difference in the evaluations of what mattered to them in terms of lifestyle. Simply, some women believed that homemaking would make them happier and more fulfilled, and others believed that a career would provide the same satisfaction. These personality traits and interests filter into the woman's belief system and therefore, are taken into account when measuring attitudes and subjective norms.

In a similar study, Vincent, Peplau, and Hill (1998) examined young women's career intentions using the TORA framework, but in a longitudinal study. Fishbein and Ajzen (1980) stated that in order for the TORA to predict behavior with the most success, intention must be measured close in time to the actual behavior; for example, asking students what is the likelihood of attending a certain class in the next week or month. They have argued that if the measure of intention and the actual behavior span a long time period, intentions may change and therefore be less predictive of behavior (see Randall & Wolff, 1994, for a meta-analytic review of this issue). However, Vincent, Peplau, and Hill desired to test the TORA using what they called "stable intentions." Specifically, the researchers examined the influences on women's career orientations and the association between career orientation and career behavior 14 years later. The subjects were women who had attended college or graduate school in 1973 and had participated in the Boston Couples Study, another longitudinal investigation (Rubin, Peplau, & Hill, 1979). Data was gathered from 105 women in 1987 to determine if their stated intentions regarding career choice had, indeed, resulted in the stated career behavior. The researchers found that their test of the TORA was generally successful. The women's career orientations while in college directly predicted career behavior 14 years later. They also found marginal correlations between gender-role attitudes and the career orientation and significant positive correlations between the influence of "important others" and their own career preferences. For example, in this sample, young women's perceptions of their boyfriends' preferences for combining marriage and career were directly related to their own preferences, as were the women's perceptions of their parents' attitudes toward careers. In conclusion, the researchers note, "it is clear that women's career intentions in early adulthood significantly predict their career behavior many years later. The college years may represent a critical time in which women formulate their career-related intentions" (p. 774-775).

A Shift From Reasoned Action to Planned Behavior

Despite the widespread application of the TORA, there were criticisms. The primary issue regarding TORA that met with considerable discussion was that of volitional versus non-volitional behavior. Liska (1984) asserted that while the TORA may be adequate for behaviors under complete volitional control, which is defined as "behavior that does not require skills, abilities, opportunities, and the cooperation of others" (p. 63), social scientists are primarily concerned with behavior that is *not* under complete volitional control. He states,

> most behavior is not volitional or nonvolitional, but ranges from behavior which requires little skill and social cooperation (e.g., waving an arm) to behavior which requires considerable skill (e.g., playing the violin) considerable social cooperation (e.g., sexual intercourse) or both considerable skill and cooperation (e.g., playing chess). Indeed, most behavior of interest seems to require social others. (p. 63)

In response to this and other criticisms of the TORA, Ajzen (1985) proposed an extension of the model, the theory of planned behavior (TOPB). This model adds to the TORA the variable of perceived behavioral control, which is defined as one's perception of how easy or difficult it is to perform the behavior (Eagly & Chaiken, 1993). Ajzen (1985) states, "the success of an attempt to execute the behavioral plan depends not only on the effort invested, but also on the person's control of other factors, such as requisite information, skills, and abilities, including possession of a workable plan, willpower, presence of mind, time, opportunity, and so forth" (p. 36). Therefore, the addition of perceived behavioral control should add to the predictive ability of the model. The more resources and opportunities individuals believe they possess, the greater their control will be over their behavior; in other words, they have confidence in their abilities to perform the behavior. For example, if a student desires to get information about careers from a guidance counselor and feels he or she has much control over this behavior (ie. living within walking distance of the counselor, the services being free of charge, the ease of getting an appointment) he or she is more likely to actually see the counselor.

Perceived behavioral control is added to the model as an exogenous variable that has both a direct effect on behavior and an indirect effect on behavior through behavioral intentions. The direct path from perceived behavioral control to behaviors is thought to reflect the actual control a person has over performing the behavior (Madden, Ellen, & Ajzen, 1992) (see Figure 2).

Applications of the Theory of Planned Behavior

Like the theory of reasoned action, the theory of planned behavior's explanatory and predictive abilities have been tested on numerous occasions. Studies by Ajzen and Madden (1986) and Schifter and Ajzen (1985) were the first to test the theory of planned behavior. The studies involved the behaviors of class attendance and weight loss, respectively. In both cases, the addition of perceived behavioral control was a significant predictor of intention as well as of behavioral achievement, and the addition of perceived behavioral control improved the predictive ability of the TORA. In other words, the TOPB was found to be a better model in that it explained more of the variance in behavioral intention and behavioral achievement than did the TORA.

In the Ajzen and Madden (1986) study, the researchers set about to compare the TORA and the TOPB with two similar experiments dealing with college students and academics. In the first study, the researchers were interested in the behavior of class attendance, which was thought to be perceived by the students as under almost complete volitional control; thus the TORA was thought to be the better explanatory model. In the second study, the researchers were interested in the behavior of getting an "A" in a course, which was thought to be perceived by the students as not under complete volitional control; thus the TOPB would be the better explanatory model. However, contrary to expectations, the TOPB, with its addition of perceived behavioral control, was found to be the better explanatory model in both experiments. Ajzen and Madden (1986) propose that no matter the degree of perceived behavioral control, the more or less the behavioral goal is perceived to be under volitional control, the intention to try to achieve the behavior will be directly proportional. In other words, the more control the person perceives he or she has over a certain behavior, the more that person will try to achieve the behavior. Therefore, the researchers conclude that by adding the measure of perceived behavioral control, the prediction of behavior, or goal attainment, will be improved.

Schifter and Ajzen (1985) examined the interaction between weight loss intentions and perceived behavioral control over body weight. In this study, the researchers predicted that the addition of perceived behavioral control would improve the predictability of the TORA model, as weight loss is often an issue not entirely under volitional control. Physiological factors or other issues can prevent intentions to lose weight from becoming actual weight loss. Important to remember is that in this study weight loss is not actually a behavior, but an outcome.

The subjects were 83 college women who considered themselves overweight, and the two-stage experiment took place over a period of six weeks. The results showed that perceived behavioral control significantly increased the predictive ability of the model, with high perceived behavioral control corresponding with both higher intentions to lose weight and greater actual weight loss.

The TOPB went on to be tested by numerous different researchers, who applied the model in an attempt to explain or predict a variety of behaviors. In meta-analyses of the applications of both the TORA and the TOPB to exercise behavior, Hausenblas, Carron, and Mack (1997) and Godin and Kok (1996) found that the addition of perceived behavioral control significantly contributed to the predictive and explanatory ability of the model in almost every study analyzed. Specifically, the researchers found that the effect size for the relationships between (1) intention and exercise behavior,(2) perceived behavioral control and intention, (3) attitude and intention, (4) attitude and exercise behavior, and (5) perceived behavioral control and exercise behavior was large for each of the studies they looked at. The relationship between subjective norm and both intention and exercise behavior was not as strong. In another meta-analysis, Sutton (1998) showed that both the TORA and the TOPB explain, on average, between 40 percent and 50 percent of the variance in intention and between 19 percent and 38 percent of the variance in behavior. While these numbers may not seem so impressive, when these variances are compared with typical effect sizes in other social science models, the percentages show that the model predicts well. In addition, as these are averages, some researchers may have used better survey instruments than others or defined their variables differently so as to achieve less than accurate results (Sutton, 1998).

The TOPB has been applied to many other health-related behaviors with success; for example, smoking behavior (Hu & Lanese, 1998; Boissonneault & Godin, 1990; DeVreies & Backbier, 1994; Godin, Valois, Lapage, & Desharnais, 1992;), alcohol abuse (Schlegel, D'Avernas, Sanna, De Courville, & Manske, 1992), driving behaviors (Parker, Manstead, Stradling, Reason, & Baxter, 1992; Parker, Manstead, and Stradling, 1995; Richard, DeDobbeleer, Champagne, & Potvin, 1994), clinical and screening behavior (Baumann, Brown, Fontana, & Cameron, 1993; DeVellis, Blalock, & Sandler, 1990; Godin, 1992; McCaul, O'Neill, and Glasgow; 1988), eating behavior (Beale & Manstead, 1991; Sparks & Shepherd, 1992), HIV/AIDS-related behavior (Basen-Engquist & Parcel, 1992; Lavoie & Godin, 1991; Terry, 1993; Schaalma, Kok & Peters, 1993), and oral hygiene behavior (McCaul, O'Neill, & Glasgow, 1988; McCaul, Sandgren, O'Neill, & Hinsz, 1993; Tedesco, Keffler, & Fleck-Kandath, 1991).

In addition, other behaviors have been studied using the TOPB, and the model has shown a good capacity to explain and predict, such as leisure behavior (Ajzen & Driver, 1992), the intentions of science teachers to use investigative teaching methods (Crawley, 1990), playing video games, voting behaviors, and giving a gift (see Ajzen, 1991 for a review).

Several studies have been conducted applying the TOPB to behaviors similar to those being looked at in this study; specifically enrollment in and attendance of a career counseling session. Crawley and Black (1990) conducted one such study. The researchers examined the utility of the TOPB for understanding and predicting physics course enrollment by high school students. The subjects in this study were 264 secondary high school students, and the researchers were primarily interested in the relationships between attitudes, subjective norms, and perceived behavioral control, and the intention to enroll in a physics course prior to graduation. It was found that perceived behavioral control and attitude were the most effective in explaining and predicting intention. Attitudes that the knowledge of physics does not matter in their future careers, as well as negative attitudes toward careers in science in general, were cited as factors contributing to non-enrollment intentions. Issues such as when the class was offered, prerequisites, fear of failure, and conflicts with other activities were all cited by the students as contributing to their lack of control in taking a physics course before graduation. In conclusion, it was suggested that the benefit to this information is that it provides a basis for formulating a persuasive message to change some of these attitudes and control beliefs, therefore potentially improving enrollment.

In another application of TOPB to course enrollment, Randall (1994) looked at the power of the model to explain and predict why graduate business students did or did not enroll in a business ethics course. The subjects of the study were 178 business graduate students in Ireland, and they were surveyed about their intentions to sign up for an elective business class, with their behaviors measured two months later. Randall found that the best predictor of intention to enroll and actual enrollment was the attitude a student had toward taking the course in conjunction with how much control the student felt he or she had about taking the course.

Caska (1998) conducted a study that examined the relationship between job search activities (job search behaviors) and college students' attitudes, subjective norms, and perceived behavioral control. The subjects in the study were college students who were expecting to graduate within two months and who were actively participating in a job search for a full-time position. The researcher hypothesized that (a) perceived behavioral control would positively influence both behavioral intentions and each type of job search behavior; (b) a favorable job search attitude would promote behavioral intentions; (c) subjective norms would be positively associated with intention; and (d) intentions would directly promote job search behaviors. In this study, perceived behavioral control was measured as self-efficacy. Job search behaviors were measured on two levels: employer contact, which was measured by way of general job search activities (ie. sending resumes, filling out applications), and social networking. Appraised challenge and appraised threat associated with the job search was also measured, by indicating agreement to items such as, "I view looking for a job as a challenging, exciting experience," and "I feel threatened by the thought of having to find a job." All other variables were measured as set forth by Ajzen (1985). In general, support for the TOPB was found. As hypothesized, intentions directly predicted behavior and were explained by attitudes, subjective norms, and perceived behavioral control. Specifically, job search intentions were positively associated with job search attitudes and subjective norms. Perceived behavioral control predicted intentions and social networking behavior but did not predict employer contact behavior. Perceived behavioral control also was significantly related to appraised challenge. As Crawley and Black (1990) concluded, Caska (1998) notes that the results of this survey and questionnaire provide helpful information that could be used to create interventions that would promote job search efforts.

Hypotheses

After a thorough review of the literature and premises, hypotheses were developed. They are as follows:

H1: The explanatory variables of behavioral beliefs, outcome evaluations, normative beliefs, and motivations to comply will predict attitudes toward and subjective norms about enrolling in a career counseling workshop.

H2: Attitudes, subjective norms, and perceived behavioral control will predict behavioral intention to enroll in a career counseling workshop.

H3: Attitudes and subjective norms will be the major predictors of the behavioral intention to enroll in a career counseling workshop.

H4: Behavioral intention will predict the behavior of enrolling in a career counseling workshop.

Research Question

RQ1: What are students' attitudinal and normative beliefs about the outcomes of enrolling in a workshop at the career counseling center?

Methodology

This study was a correlation analysis was done to explore the relationships between the variables set forth in the theory of planned behavior (Ajzen, 1985), specifically attitude, subjective norm, perceived behavioral control, behavioral intention, and behavior.

Pilot Tests

Prior to the main study, a pilot test was conducted. Students enrolled in an introductory public relations class were recruited to take the qualitative, in an effort to ascertain what the attitudinal and behavioral beliefs are about attending a career counseling workshop at the Career Resource Center.

The qualitative pilot test consisted of five open-ended questions that asked students to provide information about their attitudes toward and normative beliefs about attending a career counseling workshop.

Participants

Participants in the main study were college students currently enrolled at the University of Florida who were enrolled in typical freshman core, general education courses. Students completed a pretest, which included a series of demographic questions and a series of 67 questions designed to measure the variables of attitude, subjective norms, perceived behavioral control, and behavioral intention. The demographic questions elicited information regarding gender, age, major, future career plans, year in school, parents' educational level and occupation, and whether or not they have ever visited the Career Counseling Center on campus or a similar center at another college or university.

Ihe independent variables were *attitude*, *subjective norms*, and *perceived behavioral control*. *Attitude* was operationally defined as the attitudinal beliefs about the consequences of performing a particular behavior. In accordance with Fishbein and Ajzen's (1980) instructions, several measures combine to achieve an overall attitude score. In order to get a measure of "attitude toward the behavior of attending a career counseling workshop," both direct attitude measures were assessed using seven-point Likert-scale attitude questionnaire items (e.g. "My attending a career counseling workshop at the Career Resource Center in the next month is (useful – useless)"), as well as a combined measure, tabulated by summing the products of pairs of seven-point Likert-scale behavioral belief questionnaire items (e.g. "Attending a career counseling workshop will help me find a job or career (likely – unlikely)") and seven-point Likert-scale outcome evaluation questionnaire items (e.g. "Finding a job or career is (good – bad)"). (See Appendix B).

Subjective norm was operationally defined as normative beliefs about what significant others think about the participant performing a particular behavior. In accordance with Fishbein and Ajzen's (1980) instructions, several measures combine to achieve an overall subjective norm score. In order to get a subjective norm measure, both direct subjective norm measures were assessed using a seven-point Likert-scale subjective norm questionnaire item (e.g. "Most people who are important to me think I should attend a career counseling workshop at the Career

Resource Center in the next month. (likely -- unlikely)"), as well as a combined measure, tabulated by summing the products of pairs of seven-point Likert-scale normative belief questionnaire items (e.g. "My friends think I should attend a career counseling workshop at the Career Resource Center in the next month. (likely – unlikely)") and seven-point Likert-scale motivation to comply questionnaire items (e.g. "Generally speaking, I want to do what my friends think I should do. (true-untrue)"). The normative belief measures were created using the results of the first pilot test responses. On that pilot test students were asked to provide who were the people who might influence their decision to attend a career counseling workshop (see Appendix A).

Perceived behavioral control was operationally defined as the beliefs about the control the individual feels he or she has over performing a particular behavior. In accordance with Ajzen's (1985) instructions, a direct measure using a seven-point Likert-scale was used to achieve a perceived behavioral control score. (e.g. "I have complete control over whether I attend a career counseling workshop in the next month. (true-untrue)").

Dependent variables

For both parts of the study, the main dependent variable was *behavioral intention*. This variable was selected as the dependent variable as of primary interest in this study is how students actually behave. The TOPB states that behavioral intention directly predicts behavior. Therefore, the researcher was most interested in seeing how the messages would impact reported behavioral intentions following exposure to treatment. *Behavioral intention* was operationally defined as how likely or unlikely the participant is to perform a specific behavior, which in this study was attending a career counseling workshop. As with the other variables in the theory of planned behavior (Ajzen, 1985), a questionnaire item was used to achieve a behavioral control score (e.g. " I intend to attend a career counseling workshop at the Career Resource Center in the next month. (likely – unlikely)").

For one of the hypotheses, *behavior* was a dependent variable. *Behavior* was operationally defined as the actual attendance of a career counseling workshop. This measure was gathered at the Career Resource Center during the workshop itself. It was a categorical measure, either yes, the participant did attend the workshop, or no, the participant did not attend the workshop.

Results

Pilot Test

Students enrolled in an introductory public relations class were recruited to take part in the first pilot test, a qualitative questionnaire designed to determine the students' salient beliefs about attending a career counseling workshop. The questionnaire consisted of five questions. Two questions asked about students' attitudinal beliefs about attending a career counseling workshop: "What do you believe are the advantages of your attending a career counseling workshop in the next month?" and "What do you believe are the disadvantages of your attending a career counseling workshop in the next month?" Two questions asked students for information about their beliefs about the outcomes of attending a career counseling workshop: "What positive outcomes do you associate with attending a career counseling workshop in the next month?" and "What negative outcomes do you associate with attending a career counseling workshop in the next month?" One question asked students for information about their normative beliefs: "Who are the people who might influence your decision to attend a career counseling workshop in the next month?"

Ninety-eight students completed this questionnaire. Their responses were tabulated, and the most commonly mentioned beliefs were used to develop the measures that made up the main study's questionnaire. The detailed results of the questionnaire will be discussed in the primary analysis section (see Research Question).

Main Study

Study participants. Five hundred sixteen students participated in this part of the study by completing a questionnaire. Sixty-seven percent of the students who participated were female (n=345). The majority of students were freshman, 76%, (n=392). Seventeen percent were sophomores (n=88), 6 % were juniors (n=31), and 1% were seniors or others (n=5).

Twenty students were younger than 18 (4 %), while the majority of students, 86 %, were

18-19 years old (n=446). Eight percent of the students were between the ages of 20 and 23 (n=44). One percent of the students were 24 years old or older (n=6).

Forty-one percent of the students who participated reported being certain of their career choice (n=212); while the majority, 59 %, reported being uncertain of their career choice (n=304).

Primary Analyses

This section will discuss the results of the hypothesis tests and answer the research question: What are students' attitudinal and normative beliefs about the outcomes of enrolling in a workshop at the career counseling center?

Correlation Study

Hypotheses one, two, three and four, each of which served to test the Theory of Planned Behavior, were tested using linear regression. Hypothesis one stated that the explanatory variables of behavioral beliefs and outcome evaluations, which were thought to predict attitudes toward enrolling in a career counseling workshop, and normative beliefs and motivation to comply, which were thought to predict subjective norms about enrolling in a career counseling workshop. The regression analysis showed a significant and positive correlation between the weighted variables representing behavioral beliefs and outcome evaluations and the attitude index (r=.610, p<.0001). The regression analysis also showed a significant and positive correlation between the weighted variables representing normative beliefs and motivations to comply and general subjective norm variable (r=.602, p<.0001). Therefore it was concluded that these weighted variables were significant predictors of attitude and subjective norms.

Hypotheses two and three stated that attitudes, subjective norms, and perceived behavioral control would predict behavioral intention to enroll in a career counseling workshop, and that attitudes and subjective norms would be the major predictors of behavioral intention to enroll in a career counseling workshop. A regression analysis showed a significant and positive correlation between attitude and behavioral intention (r=.527, p<.0001), and a significant and positive correlation between subjective norm and behavioral intention (r=.341, p<.0001). The correlation between perceived behavioral control and behavioral intention was positive and significant, but much smaller (r=.132, p<.01).

The three variables, attitude, subjective norm, and perceived behavioral control, then were entered into the model using stepwise regression analysis (see Table 1). The results showed that only attitude and subjective norms were significant predictors of behavioral intention (see Table 2). As students' attitudes toward attending a career counseling workshop increase, so do students' intentions actually to attend the workshop. As subjective norms are perceived to endorse attending a career counseling workshop, students' intentions actually to attend the workshop increase.

TABLES 1 AND 2 ABOUT HERE

Hypothesis four stated that behavioral intention would predict the behavior of enrolling in a career counseling workshop. Analysis showed a positive and significant correlation between behavioral intention and actual behavior (r=.278, p<.0001). As intention to attend a career counseling workshop increased, actual attendance at the workshop also increased (B=.278, t=3.568, p<.0001). From the results of these hypotheses tests, a path model showing the application of the Theory of Planned Behavior in regards to attending a career counseling workshop was developed (see Figure 3).

FIGURE 3 ABOUT HERE

Research Question

The research question asked what were students' attitudinal and normative beliefs about the outcomes of enrolling in a career counseling workshop. To answer this question, the results of the qualitative pilot test were organized and tabulated. In addition, the means of the students' responses to the attitude, normative beliefs, and subjective norm measures on the main study questionnaire were compared.

The qualitative test revealed that students have distinct and fairly uniform ideas about the advantages and disadvantages of attending a career counseling workshop. Among the most common advantages mentioned were that the student would obtain information about careers and majors (30 responses), that the workshop would help give the student a goal or direction (9 responses), that the workshop would give the student further information about careers he or she is already considering (7 responses), that the workshop would clarify questions about careers (6 responses), and that the workshop would help the student decide on a career (5 responses).

Among the most common disadvantages mentioned were that the student might become confused (6 responses), that the workshop would be a waste of time (6 responses), that the workshop would take up too much of the students' time (5 responses), that the student might become overwhelmed by too much information (5 responses), that it might be too early in the students' college career to get career information (5 responses), and that the student might find out he or she was in the wrong major for the career he or she wants (4 responses).

Similarly, the students reported clear and uniform positive and negative outcomes of attending a career counseling workshop. The most commonly mentioned positive outcomes were that the student would learn more about careers (18 responses), the student would become more knowledgeable (10 responses), that the student would get a direction (9 responses), that the student would learn specific techniques such as interviewing and resume building (7 responses), that the student would be helped with making a decision about the future (6 responses), that the student would get a job (5 responses), and that the student would meet people already in the field/professionals (5 responses).

The most commonly mentioned negative outcomes of attending a career counseling workshop were that the workshop would be a waste of the students' time (7 responses), that the student might then not know what he or she wanted to do anymore (5 responses), that the student would become more confused or overwhelmed (5 responses), that the student might change his or her mind (5 responses), that the student might discover he or she was not qualified for any job (4 responses), and that the student might feel more pressure (4 responses).

Students were also asked to report who might influence their decision to attending a career counseling workshop. The most commonly mentioned individuals were teachers (41 responses), friends (34 responses), parents (17 responses), academic advisers (8 responses), other family members, such as sisters and brothers (7 responses), and boyfriends/girlfriends (7 responses).

It was also of interest to explore how the measures of behavioral beliefs, attitudes, normative beliefs, and subjective norms were evaluated by the students. To do this, means and standard deviations were tabulated for each of the measures.

Of the individual attitude measures, the means show that the students evaluated each of the attitude measures on the "positive" side of the scale. For example, students reported feeling that attending a career counseling workshop would be informative (M=2.54), useful (M=2.59), wise (M=2.65), and beneficial (M=2.66). The overall attitude index measure mean was 2.91.

Of the individual behavioral beliefs measures, the means yielded some interesting results. Students reported that they thought it was quite likely that a career counseling workshop would help him or her get accurate information about internships (M=2.15) and jobs and/or careers (M=2.23). Students did not feel that attending a career workshop would make him or her more confused (M=4.61), overwhelmed (M=4.42), bored (M=4.03), or more pressured (M=4.42). In addition, students reported feeling that it was slightly likely that attending a career counseling workshop would inspire them (M=3.39), would help them find a job or career (M=3.05), would help them focus (M=3.09), would prepare them for the job search (M=2.72), would help them make an informed decision about their career choice (M=2.86), and would help put them on the right track for their future career (M=2.89).

The means of students' evaluations of their normative beliefs showed that parents were perceived to be most likely to think that the student should attend a career counseling workshop (M=3.79), followed by academic advisers (M=3.95). Friends were perceived to be most least likely to think that the student should attend a career counseling workshop (M=4.45), followed by boyfriends or girlfriends (M=4.37). The overall subjective norm mean was 4.27 (see Table 3).

Discussion

Usefulness of the Theory of Planned Behavior to Predict Career Counseling Attendance

Hypothesis one through four predicted that the variables set forth in the TOPB could be effectively applied to the behavior of attending a career counseling workshop. The results showed that while attitude and subjective norms were found to be significant predictors of behavioral intention, the data in this study do not support the addition of perceived behavioral control to the model. In addition, behavioral intention was found to be predictive of behavior, but not as strongly as was expected. Unlike many of the previous tests of the TOPB which have found very strong correlations between behavioral intention and behavior, there was only a moderate correlation in this study (r=.278).

Comparison of the Importance of Attitudes, Subjective Norms, and Perceived Behavioral Control

While it was believed that each of the three main variables would be significant, and strong predictors of behavioral intentions, this was not the case. Students reported being completely in control of whether or not they attended a career counseling workshop in the next month. They did not indicate that there were any mitigating factors or people controlling or influencing their decisions and ability to attend the workshops. When the variable of perceived behavioral control was entered into the TOPB model, it did not increase the predictive ability of the model. In addition, there was no significant path between perceived behavioral control and behavior, as other TOPB studies have shown. It was concluded that students perceived attendance at a career counseling workshop to be a completely, or virtually completely, volitional behavior.

However, feeling that they were in complete control over attending did not mean that they intended to attend the workshops. In other words, just because it was perceived as being easy to attend didn't mean that they would. Judging from the results of the regression analysis, attitudes were by far the most powerful predictor of whether the student would attend the workshop, with subjective norms adding only slightly to the equation.

The fact that subjective norms played such a minor role in predictive ability of the model was surprising. Much research has concluded that those people close to a young adult have a great impact on their behaviors, and the TOPB and TORA have been tested on numerous occasions and found a strong relationship between subjective norms and intention. However, the results of this study indicate that these subjects were not that influenced by their perceptions of whether or not those close to them thought they should attend a career counseling workshop.

These results run contrary to what Crawley and Black (1990) found in their study of the intentions to enroll in a high school physics course. In this study, the researchers found that both attitude and subjective norms were strong predictors and that the addition of the variable of perceived behavioral control increased the predictive ability of the model. Students cited several mitigating reasons why they might not have control over enrollment. These reasons included when the class was offered, conflicts with other activities, and fear of failure.

However, other researchers have found similar results. For example, Caska (1998) conducted a study that examined the relationship between job search behaviors and the variables in the TOPB. She broke down her behavior variable into two measures: one that measured social networking behavior, and another that measured employer contact (ie. sending resumes, filling out applications). Both attitude and subjective norms were strongly correlated with behavioral intentions. However, perceived behavioral control was found to predict social networking behaviors but not employer contact. She concluded that the reason for this might stem from a misperception of how easy or difficult it might be actually to make employer contacts, and that external factors that are out of the job-seekers' control were not considered (eg., actual job openings, actually getting the interview). In other words, while both behaviors were non-volitional, the students' perceived control over social behaviors was more closely aligned with actual control, and vice versa for employer contacts.

In light of these studies and others that produced similar results, several explanations can be offered for perceived behavioral control not being predictive. First, in contrast to the Crawley and Black (1990) study, many of the issues the students cited as potentially keeping them from enrolling in the science class seem not to be applicable here. For example, it is possible that the workshops were offered at varied enough times as to not be a huge scheduling conflict, and/or the workshops were seen as only a "one-shot deal" so there would be no real problem to make time for it. Another factor the high school students raised that does not apply in this specific career counseling setting that is there are no prerequisites for them to accomplish before attending, nor do the students need to prepare anything to attend the workshops. In addition, while it is quite possible that a student might not have an aptitude in science and could fail a physics course, it is impossible to "fail" a career counseling workshop. When compared, it can easily be argued that enrollment in a course and enrollment in a career counseling workshop are two completely different situations in regard to perceived behavioral control, and thus could account for the difference in results between Crawley and Black's study and this one.

Second, if it is considered that one explanation offered by Caska (1998) and Ajzen (1988) is that direct links between perceived behavioral control and behavior can only be expected if actual control and perceived control are approximately the same, then perhaps students in this study had a misperception of how easy it would be for them to attend a workshop. For example, they filled out the survey with the control and behavioral intention measures before they were given a copy of the scheduled workshop dates and times. Perhaps they believed that there were more offered, or that they would be offered at more convenient times. In addition, it must be considered that the workshops the students were encouraged to attend and that the behavioral measures were taken from took place the week prior to and the week finals began. This, too, may have had a large effect on the misperception of how easy it would be to attend the workshops as studying, review sessions, and actual final exams may have conflicted with the times the workshops were offered.

While subjective norms were found to be a significant and positive predictor of intentions, it is important to discuss possible reasons why a stronger relationship was not found. The regression analysis showed that when students reported perceiving that those people who are most important to them thought they should attend a career counseling workshop, they reported a higher intention to attend than those students who did not. However, if one looks at this relationship as the level by which a student feels the need to comply with the feelings of those people important to him/her, the correlation is quite small. In other words, the students do not feel that complying with their significant referents is all that important.

An obvious reason for this is suggested by the career counseling and higher education literature. Specifically, students come to college to assert their independence -- independence from parents and from peers. They come to college to test the waters, so to speak. They want the chance to find themselves and to develop their own attitudes and opinions. Therefore it can be hypothesized that on an issue like career planning, a student will do what he or she wants, when they want, because perhaps for the first time they can. Their parents aren't standing over their beds in the morning telling them to get to the career center, and judging by the results of the survey question measuring peer influence, their friends aren't thinking about career counseling any more than they are (M=4.5; *4 being representative of a "they neither think I should nor shouldn't attend a career counseling workshop" response.*)

Another reason that subjective norms might not be having that strong an influence on student intentions is that it simply may be too early in the student's college career for them to have considered what others think about their attending a career counseling workshop. The majority of the population were first-semester freshmen, and it is quite possible that their parents, teachers, and friends were not yet discussing career counseling with them. Because most of the means for the normative belief measures ranged around "4", which indicates a "neither" response (see above), it could be interpreted that the students really didn't know if their referents wanted them to attend a workshop or not.

Both of these possibilities also help to explain why attitudes were such a strong and dominant predictor. The students indicated that their own beliefs and attitudes were what predicted their intentions to behave. The more positively the students evaluated attending the workshop (eg., the more it would help them decide on a career, the more it would inspire them), the higher their intention to attend.

Relationship Between Behavioral Intention and Behavior

As set forth in the TOPB and the TORA, the results showed that behavioral intention predicted behavior. However, the relationship between the two was weaker than was anticipated. Other researchers have found a much stronger predictive relationship between the two. For example, Sheppard, Hartwick and Warsaw (1988) conducted a meta-analysis of 87 TORA studies and found that the frequency-weighted average correlation was r=.53.

This can be explained simply by the fact that turn-out at the actual career counseling workshop was extremely low. Only four students who participated in this study attended a workshop within the month following the study. As was discussed in regard to the perceived behavioral control variable, there were several complicating factors that may have contributed to the students not attending in greater numbers, and for the discrepancy between intentions and actual behavior. Again, as with PBC, the dates and times of the workshops may not have been what the students expected, finals week may have been overwhelming, and there may not have been any workshops offered that were of interest to the students.

Conclusion

In sum, as proposed by the Theory of Reasoned Action (Fishbein and Azjen, 1975), when behaviors are perceived by the subjects to be completely under their control, the TORA is an effective model for prediction. In this study, it was concluded that this was so. The elimination of the variable of perceived behavioral control provides more evidence in support of the TORA and its more simplistic path model to predict the behavior of career counseling attendance. Attitudes and subjective norms predicted intention and, in turn, intention is predicted behavior.

These results offer evidence that students do hold certain salient beliefs regarding career counseling. Their attitudes toward career counseling were found to be the strongest predictor of intention to seek advising. Therefore, considerable success might be achieved by creating media messages and campaigns specifically designed, in this case, to change their attitudinal beliefs from perceiving career counseling as useless, unhelpful, and uninformative.

Based on the relationships between the variables in the TORA, career counseling professionals and educators can begin to see how students may go about beginning the process of selecting a career and take any necessary steps to help assure that students who need career counseling assistance get it.

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FIGURES

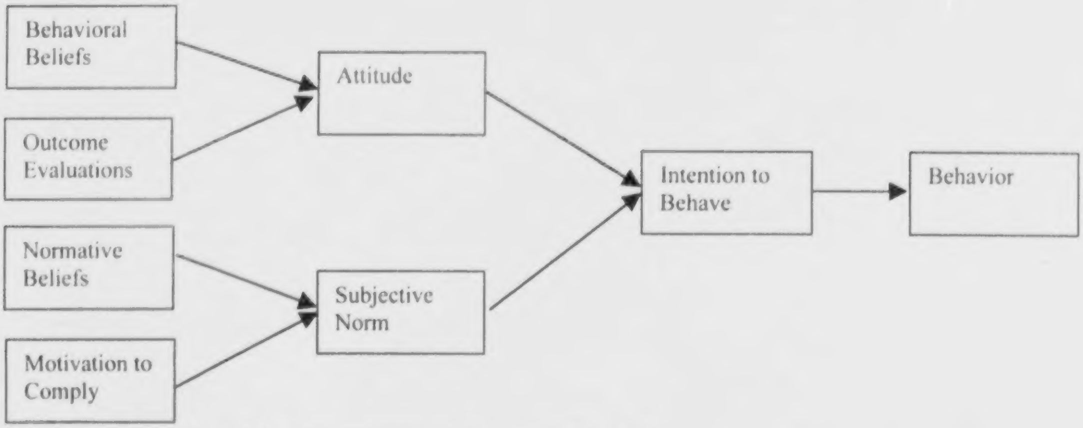

Behavioral Beliefs
Outcome Evaluations
Normative Beliefs
Motivation to Comply
Attitude
Subjective Norm
Intention to Behave
Behavior

Figure 1: Path Model for the Theory of Reasoned Action.

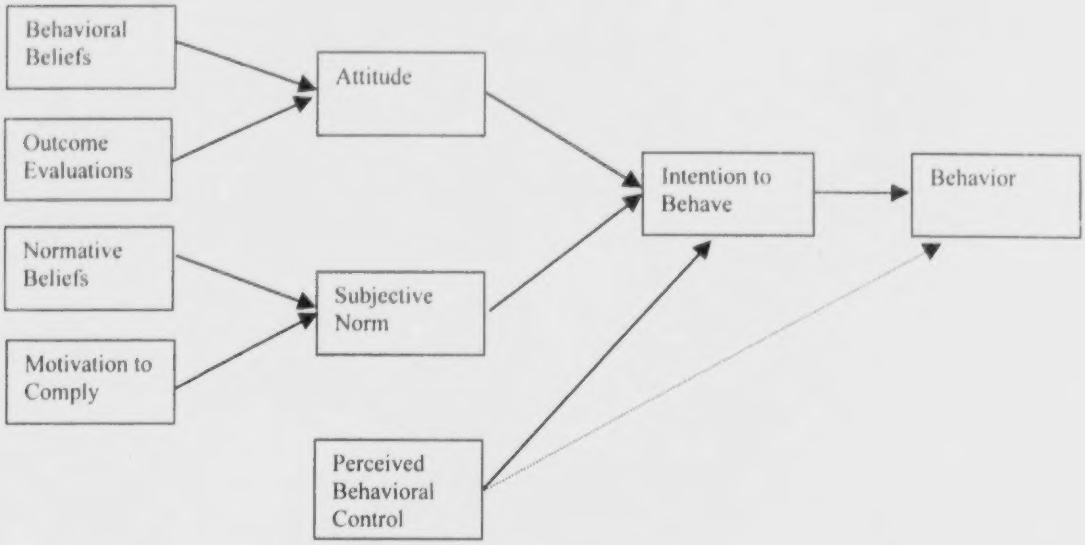
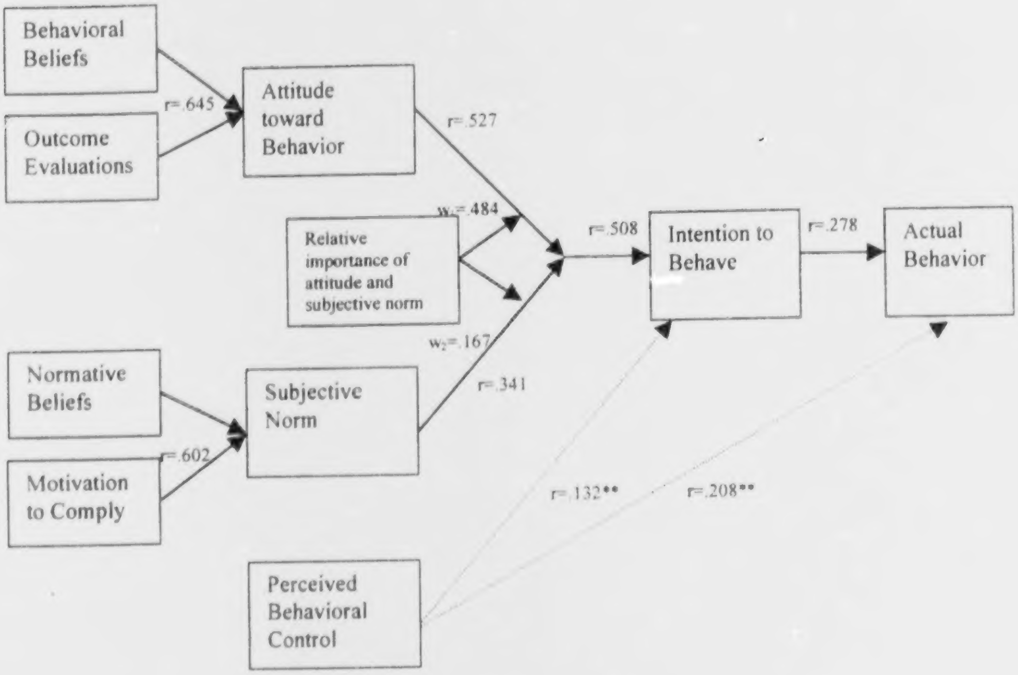

Behavioral Beliefs
Outcome Evaluations
Normative Beliefs
Motivation to Comply
Attitude
Subjective Norm
Perceived Behavioral Control
Intention to Behave
Behavior

Figure 2: Path Model for the Theory of Planned Behavior.


Behavioral Beliefs
Outcome Evaluations
r=.645
Attitude toward Behavior
r=.527
w1=.484
Relative importance of attitude and subjective norm
w2=.167
r=.508
Intention to Behave
r=.278
Actual Behavior
Normative Beliefs
Motivation to Comply
r=.602
Subjective Norm
r=.341
r=.132**
r=.208**
Perceived Behavioral Control

Path Model for the Theory of Planned Behavior.
**non-significant path

TABLES

Table 1: Stepwise model.

Measure	Step	r
Attitude	1	.484
Subjective Norm	2	.508
Perceived Behavioral Control	3	.508

Table 2: Intention to Attend a Career Counseling Workshop.

Measure	St. Beta	t	Significance
Attitude	.484	12.530	.0001
Subjective Norm	.167	4.073	.0001
Perceived Behavioral Control	-.002	-.041	.968

Table 3: Means and Standard Deviations for Individual Measures.

Means and Standard Deviations for Individual Measures		
Measure	Mean	SD
Overall attitude	2.91	.85
Good-bad	3.29	1.33
Wise-foolish	2.65	1.10
Beneficial-harmful	2.59	.88
Useful-useless	2.66	1.01
Favorable-unfavorable	3.20	1.19
Desirable-undesirable	3.67	1.33
Helpful-unhelpful	2.67	.969
Informative-uninformative	2.54	9.44
Overall subjective norm	4.27	1.57
Academic advisors	3.95	1.38
Teachers	4.06	1.38
Parents	3.79	1.63
Friends	4.45	1.44
Boyfriend/girlfriend	4.37	1.40
Other family members	4.21	1.43
Find a job/career	3.05	1.21
Figure out a job/career	3.13	1.23
Contacts with professionals	2.67	1.03
Overwhelmed	4.42	1.39
Focus	3.09	1.15
Bore	4.03	1.35
Confident	3.42	1.23
Prepare for job search	2.72	1.04
Inspire	3.39	1.26
Change my mind	4.29	1.41
Informed decision	2.86	1.19
Right track	2.89	1.22
Pressure	4.42	1.39
Decide on a career	3.58	1.42
Declare a major	3.26	1.44
Accurate information/career	2.23	.95
Accurate information/internship	2.15	.92
Hassle	4.09	1.44
More confused	4.61	1.37
Waste of time	4.81	1.40

Student Preferences for

University Recruiting Brochure Designs

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ABSTRACT

Researchers tested five aspects of college viewbook design– percentage of text per page, number of pictures per page, color versus black and white photographs, campus scenes versus pictures of people, and page orientation. Respondents were high school students. Results showed students' interest in a college was significantly greater in regard to two of the elements analyzed– multiple pictures on the viewbook page rather than just one, and pictures of people rather than photos of buildings.

INTRODUCTION

During the past three decades, total college enrollment has been on the rise. More and more high school students are choosing to attend colleges and universities after they graduate. According to The Condition of Education 2000 (2000), college enrollment generally increased over the last 30 years and researchers project a continued increase into the next decade (p. 38). The percentage of 12th graders who said they "definitely will" complete a bachelor's degree increased considerably from 1980 to 1997. Statistics show a rise from 35 to 56 percent (Condition, 2000). This same study shows a rise in the number of high school graduates who are entering college immediately after high school. In 1972, about half (49 percent) of all high school completers ages 16-24 enrolled in a college/university immediately after high school; in 1998 about two-thirds (66 percent) did so (Condition, 2000).

Statistics such as these and others reveal one central fact—college enrollment continues to grow every year and more and more high school students are choosing to attend college immediately after graduating. This is good news for colleges and universities; however this rise was not always the case. In the late 1970s demographers forecasted a drought in the number of college freshmen, a drought that created an increase in higher education marketing and a constant focus on admissions goals and enrollment numbers (Dalton, 1988). As current statistics show, the drought did not last; however, the admissions drive for more and more students has continued to increase. College admission departments are researching how students choose colleges so they can better pursue prospective students. Marketing in higher education is also on the rise as countless studies are conducted concerning what students want from a college/university. One area of marketing in higher education is the use of promotional materials such as college viewbooks. These information pieces are sent to prospective students in an effort to foster communication. Viewbooks are created in a variety of styles including different writing styles, layout design, and photographs in an effort to effectively appeal to prospective students. College viewbooks are the primary focus of this study.

Purpose of the Study

According to the Education Digest (2000), there are 2,673,067 high school seniors and 2,147,000 college freshman in the United States. With such a market for colleges and universities, it is important for them to understand the influence of promotional materials on the college choice process (p. 212). Colleges and universities are in competition with one another for students which means that better recruitment is a must for colleges that want to continue to attract students and increase enrollment.

A look at research conducted concerning how students choose a college reveals that there are models of stages or thought patterns that guide most students as they try to choose a college. The majority of models include the institution communicating with the student, the student learning about the college/university, or the combination of both with students investigating or seeking more information about a college and then receiving and reviewing the information. In an effort to recruit more high school students, many admissions departments began embracing the business strategy of marketing in the development of admissions strategies. Patricia Bromley and Joan Fischer (2000) state that "in the business of higher education, students are the primary consumers, education is the primary product, and promotional materials are the initial sales materials" (para. 1).

Promotional materials, primarily viewbooks, are a permanent, highly personal communication tool that give the college/university control over the quality and timing of the piece (Sevier, 1990). A University of California study reveals that catalogs and college publications were selected as the second most important information source following parents or immediate family (Litten & Brodigan, 1982). This study evaluated students' ratings of various attributes according to how much they influenced their decisions about the college they selected (p. 246-247).

This University of California study and others show the importance students place on promotional materials, which is why it is critical for schools to have a viewbook that appeals to students. One study analyzed promotional materials that were sent in response to a letter requesting information. The researchers discovered that 80 percent of all schools sent a viewbook in response to an inquiry letter (Esteban & Apel, 1992).

The majority of viewbooks have the same look—the design elements, clichéd themes, and photograph settings are all similar. This creates a stack of mail sent to prospective students that all look the same. Students in a 1987 study said that the "appearance of the publication is everything" (Sevier, 1987). So when the appearance of one viewbook blurs with the countless others sitting in a pile in a student's room, the viewbook is not fulfilling its purpose to serve as a communication vehicle with the propective student. Surveyed students said "they first gave a mailing a quick glance . . .

if it was not visually appealing, they rarely bothered to read any copy" (Sevier, 1987). Another study by Richard M. Canterbury (1989) determined that students feel viewbooks "are all the same . . . when one separates from the pack, it draws attention and gratitude" (p. 12).

The appearance of viewbooks is described by many researchers as a "cover recipe" in which each school uses the same type of photograph with "too neat, too pretty" people (Esteban &Apel, 1992). These photographs become a blur of backpacks and smiling faces to a prospective student sifting through the material. Most schools also use taglines or slogans such as "A Heritage of Excellence" in their recruiting brochure, which are confusing and unbelievable to students (Esteban & Apel, 1992).

The problem facing admissions counselors is whether or not to try something new and different when creating a viewbook, something different from the "recipe." This study will attempt to evaluate the pictures and the text that influence students as they choose a college. The study will not look at how students choose a college, but rather the type of viewbook design that is the most appealing or interesting to a student, and which college's viewbook would influence the most students to request more information about that college.

This study is significant because it uses an experimental design method to evaluate students' reactions to differently designed viewbooks. Past studies that have researched college recruitment materials have "generally employed survey procedures" or focus groups methods (Chapman, 1981). Since this study will use an experimental method with the use of various design styles of college viewbooks, a new area of information should be discovered.

Statement of the Problem

The idea that a college or university's viewbook is a "school's suitcase" packed with "everything a school needs to live within the minds of its prospects" places a heavy weight on the appearance and effectiveness of a viewbook (Esteban & Apel, 1992). In order for a viewbook to be an effective tool, it must communicate with its target audience—the student. While some colleges may target the nontraditional student, the majority of schools want to recruit the current high school student. This means that the viewbooks should be designed to attract the attention of a 16-19 year old.

In many viewbooks, the text does not "address the anxiety or worries of the student, or even acknowledge they're speaking to an individual . . . they are formal in content, sentence structure, and word choice" (Esteban & Apel, 1992). An analysis by David Treadwell and Jane Keller (1991) found that students like "big, color photos and a *USA Today* approach to copy . . . the familiar, the easy to grasp, even the tiniest bit flashy" (p. 24). All colleges have a computer lab and classrooms, so Treadwell and Keller suggest that photographs should show what the students really want to know about, the dorm rooms, dining halls, student lounges, and hangouts (p. 24).

These suggestions coupled with various others from past research suggest the current study should have value. While focus groups have been conducted on this matter and surveys have been administered, this study will research whether students actually do show an added interest or gain a certain opinion of a college based upon the design of that school's viewbook. It analyzes whether the design of a recruitment publication causes a high school, college-bound student to have an increased interest in a college or university.

LITERATURE REVIEW

Student College Choice

During the last four decades, research has been conducted, articles have been written, and models have been presented in an effort to understand how students choose a college or university. The phrase, student college choice, has many different terms and definitions surrounding it, all created in an effort to explain just what makes students choose one school over another. Terms such as "college plans," "educational goals," and "student buying behavior" are used by various authors to describe the process of choosing a college. Hossler, Braxton, and Coopersmith (1989) define student college choice as "a complex, multistage process during which an individual develops aspirations to continue formal education beyond high school, followed later by a decision to attend a specific college, university or institution of advanced vocational training" (p. 234).

In the 1980s, the topic of student college choice began attracting more interest because of several factors, including public policy issues related to student financial aid and student access along with a growth in competition for a declining pool of traditional-age students (Hossler & Gallagher, 1987).

Researchers began gathering information about college choice to be used by state and federal policy-makers to more effectively target financial aid dollars (Hossler, Braxton & Coopersmith, 1989). College administrators also became interested in student college choice as university competition became more fierce. Institutional administrators wanted to "understand the phenomenon of student college choice in order to develop marketing strategies designed to attract the desired number of students . . . or students with desirable academic and nonacademic characteristics" (Hossler, Braxton & Coopersmith, 1989). David Chapman stated in 1981 that the "prospect of a sharp decline in college applications and subsequent enrollments has generated tremendous pressure on college administrators to find more effective ways to attract students" (p. 490).

It is important to understand the process of student college choice before recruitment activities can be formulated and implemented. Sevier (1987) describes the college choice process as "enormously complicated, marked by periods of rationality, irrationality, and even whimsy." One of life's major decisions is being made when choosing a college. A lot of time, money, and effort will be involved and the shape and quality of the student's life may rest on the outcome (Canterbury, 1999). Canterbury believes that "the decision of which college to attend is quite possibly the first significant choice a student must make in their seventeen to eighteen year-old life" (para. 8).

In an effort to better comprehend the thought processes and stages a high school student experiences as they make decisions about which college to attend or even if they want to further their education, researchers created models depicting their view of the student college choice process. Various models outlining student college choice have been created in an effort to further understand the decision process. The models also allow for a direction for further research and a background on which college admission administrators can base their choices of prospective students. Chapman (1981) states that few admissions officers operate from a systematic model of the influences on student college choice. Without such a model, "colleges may overlook ways to increase the effectiveness of their recruiting or, conversely, overestimate the influence of recruiting activities in which they do engage" (p. 490).

One model of student college choice created by David W. Chapman (1981) suggests that the decision is influenced by a set of student characteristics in combination with a series of external influences. The external influences are grouped into three categories: "the influence of significant persons, the fixed characteristics of the institution, and the institution's own efforts to communicate with prospective students" (p. 492). Chapman concludes his article by emphasizing the importance for researchers to recognize the complexity of college choice in deciding which variable they will investigate, which they will control, and which they will ignore (p. 499).

A 1988 study conducted by Herbert F. Dalton, Jr. established a five-stage model describing student college choice. Stage one occurs when students learn about specific colleges; stage two includes sifting through colleges and establishing a list of choices. Stage three occurs when students have specific lists of colleges and are ready to receive detailed information about them. Students then establish a shorter list of colleges which they will visit and apply to in stage four, followed by a final stage when students are accepted and they make their final choice.

Don Hossler and Karen S. Gallagher (1987) present a three-stage developmental model of college choice in which students move toward an increased understanding of their educational options as they seek a "postsecondary educational experience" (p. 208). The first stage is referred to as the predisposition phase. This step involves students determining whether or not they want to continue their education beyond high school. Once students decide if they want to attend college, the search phase begins. During this phase, students seek more information about colleges and universities. The final phase in Hossler and Gallagher's model is the choice phase. Student's evaluate and narrow their choices to a few specific institutions and make a decision (p. 211-216).

Another model presented by Hanson and Litten (1981) outlines six steps in the admission process: desire to attend, decision to attend, investigation of institutions, application for admission, admission and enrollment. These steps form yet another model attempting to outline the student college choice process.

Other models concerning student college choice have been created and some have been built upon those mentioned previously. These models help explain the process that a student might follow when they are selecting a university. However, the models do not specifically address the elements that influence students as they chose a university such as parents, friends, school image, and reputation. Studies, primarily surveys and focus groups, have also been conducted in an effort to determine what elements influence the college choice process.

Litten and Brodingan (1982) review past research in an article discussing the college selection process. One study revealed that there are four desired items of information that high school sophomores want to know when they are selecting an institution to attend. They included: "transferability of courses, courses required for completion of major, the point at which a major must be declared to graduate on time, and how classes are taught" (p. 243-244). A survey of college students from this same study revealed four specific institutional items that are pivotal to college selection: college and program quality, size, cost, and location (Litten & Brodignan, 1982).

Millard Michael Straw (1996) looked at the recruiting techniques used by colleges and universities to attract Missouri high school music students. Straw cites factors that "interact to contribute to a student's college choice decision." He places the factors into three categories including "financial considerations, the attributes and resources of the college, and the personal influence of various people on the student" (p. 9). Financial considerations include both costs of attending college such as tuition, room, board, books, etc. and the available financial aid such as scholarships, grants, loans, and workstudy. College attributes and resources include location, proximity to home, a particular academic program, academic quality, size of the institution, college reputation, and social atmosphere. Straw also describes the personal influence of people which consists of interactions with parents and siblings, counselors and teachers, friends, college recruiters, and alumni (p. 9-10).

Several authors discuss the importance of the image of a college or university to students as they make their college decision. John Maguire and Robert Lay (1981) define prospective students' images of a college as "general perceptions" of a school (p. 123). An article by Robert A. Sevier (1996) discusses student recruitment. He believes "image is everything" (p. 11). In analyzing thousands of surveys from college-bound high school students, Sevier found that "more students choose a college because of this image or reputation than any other factor" (p. 11). A quote from a focus group of high school seniors states that "when it came down to it, I just couldn't attend that other school. Even though they offered me more aid and even though it was in a more attractive location . . . I decided to go to a college we knew—a college we had heard of" (p.11).

Maguire and Lay (1981) state that "prospective students develop images of many colleges and universities . . . they match their abilities, wants and needs with images" (p. 123). The authors suggest that as the applicant moves towards making a choice images are modified as more information is sought out. "In an ongoing way, images condition appraisal through selective perception" (Maquire & Lay, 1981). So when decisions are made "images are broken down to those attributes which distinguish among schools and which are thought to be most important by applicants" (p. 123). Maguire and Lay's study discovered twenty-eight attributes that define the content of applicant's images of a certain college including: general reputation, athletic programs, distance from home, and the size of school (p. 126-128).

Research by Hossler, Braxton, and Coopersmith (1989) shows that parents exert the most influence on college choice with other significant influences including: counselors, peers, teachers, and college admissions officers. Several other studies show the impact of parents and the role they play in shaping attitudes toward higher education and actual college choice (Hossler & Gallagher, 1987).

A significant number of studies show the influences that may impact students' choice of college. For the purpose of this study, it may help to look at the influencing factors for students' college choice as one of two categories, those which are controllable from the standpoint of the college and those which are not (Kellaris & Kellaris, 1988). A college and university can control its own efforts to communicate with prospective students. This ability makes marketing in higher education and recruiting techniques critical to the college administrator. However, research into the college choice process can in itself be a powerful marketing tool with benefits to both institutions and students (Maguire & Lay, 1981).

Marketing in Higher Education

In the late 1970s, demographers forecasted a 15-year drought of college freshmen. While the drought was not as dire as first predicted, educational institutions began researching how students choose colleges, as mentioned previously, and they used that research to engage in a marketing arms race (Dalton, 1988). At this point in history, marketing was a fairly new and promising concept in postsecondary admissions. Various articles began appearing in the late 1960s and 1970s which began mentioning and encouraging "the use of marketing techniques and strategies by college and university admissions officers" (Blackburn 1980). James C. Blackburn (1980) states that "by 1978 marketing in college admissions had pervaded the professional conversations and publications of admissions officers, and more firms had begun to specialize in marketing services for the recruitment programs of colleges and universities" (p. 19).

This period marked a change in both higher education and the admission profession as educational institutions realized that for a variety of reasons, they could not simply open their doors and expect floods of students. Instead, "they would need to compete for students as well as other scarce resources" (Gallagher, 1997). Many colleges and universities embraced marketing principles and rhetoric in their efforts to meet change by refining, redefining, and expanding their roles in the public arena.

Marketing can be defined in a variety of ways. Edward Ziegler (1991) states:

> Marketing is an on-going process which seeks to shape and promote a product in terms the consumer can understand and identify with. Marketing is based on the premise that an organization will be able to achieve its goals most effectively by taking into account the users of its products (in this case, prospective students). (p. 139)

Ziegler continues to explain the importance of an organization, in this case a college or university, to determine the needs, wants and desires of a target audience, the students. It must also learn to adapt itself to deliver the desired services more effectively and economically than its competitors.

The more intense competition which mounted in the 1970s and 1980s for college students allowed for the growth of a marketing approach in admissions. David W. Chapman says that "several authors argue that, through systematic application of marketing principles, a college can attract students who might otherwise not consider that institution" (p. 498). The marketing approach advocates: "research on current and prospective students and on the institution's market position, development of a market plan, and the development of new strategies involving both programs and the communication process" (p. 498).

Over the last 30 years, theoreticians have sought connections between services and higher education. It possesses all the characteristics of a service industry because they are "intangible, heterogeneous, inseparable from the person delivering it, variable, perishable, and the customer (student) participates in the process" (Canterbury, 1999). However, a challenge that higher education marketing faces is determining whether some higher education markets and characteristics are different enough from other markets served to warrant adjustments in marketing methods.

A common description of marketing includes the four Ps: product, price, place, and promotion (Sevier 1996). Numerous researchers have evaluated this idea as they seek to define these four terms in conjunction with higher education.

Richard M. Canterbury (1999) believes that an ongoing issue in higher education is the definition of its product. Some researchers consider that the product is the programs and courses, and some say it's the students themselves, particularly as graduates. Canterbury "concluded that people who attend college choose and purchase opportunities, and that late adolescent college-goers purchase a complex set of largely unpredictable, interacting, and dynamic opportunities to learn from and contribute to experiences and associations which will clarify and change their lives, short and long-term, forever" (para. 18).

Promotion, in many respects, involves marketing the other three P's through such avenues as advertising, publications, direct mail, publicity, personal contact, and environment. This idea of promotion is critical in understanding the marketing techniques that educational institutions use in an effort to recruit prospective students (Sevier, 1996).

According to Kotler, there are three types of marketing techniques used in higher education: the product-oriented approach in which the thought is to design a good college because a good product sells naturally; the hard-sell approach which is highly sales-oriented; and, the professional marketing approach which focuses on building satisfaction in a long-term clientele, and this means doing a good job of consumer and market research, market definition and certification, product and service design and development, distribution, planning, pricing and promotion (Harper, 1986).

Higher education has developed many techniques to recruit students to college and university programs. Lora B. Postelwait defines student recruitment as "the process of informing and persuading a prospective student to attend a certain institution of higher learning" (p. 8).

Millard Michael Straw's (1996) thesis looks at recruiting techniques used to recruit Missouri music students. Techniques included: scholarships, direct mail, mass media, communication forms such as personal letters and special campus events (p. 12).

A study by Kellaris and Kellaris (1988) explored the factors influencing students' college choice by surveying freshmen and transfer students. The results showed campus visits, mailings, and campus visit days as the top three perceived influences of college-student contacts. Other contributing techniques included: telemarketing, special event attendance, and magazine advertisements.

A University of California study asked students to rate various attributes according to how much they influenced their decisions about the college and which sources of information influenced them the most. The sources of information included in order: catalogs, visits, counselors, college students, college representatives, parents, and friends (Litten & Brodigan, 1982). These are all recruiting techniques that colleges employ to help market their college or university.

A similar survey at Middlebury College evaluated recruiting techniques. They discovered that college guide books are inexpensive and while they have a low impact at stage one and three (the stages when students first learn about specific colleges and the stage when a student has a specific list of colleges); they are considered effective during stage two (the stage when students sift through all the colleges they know and are establishing a list of choices) (Dalton, 1988). Campus visits while expensive received the highest overall impact ratings in this survey. College fairs were only moderately effective and videos were ineffective at all stages. Personal interviews have significant impact during the later stages of college choice (Dalton, 1988).

Recruiting techniques are described as "college courtship procedures" by Hossler and Gallagher (1987) in their article. Their study showed that while financial aid awards are one of the highest ranking recruiting techniques, non-aid based courtship procedures are also very important, especially personalized, written material (p. 217).

While the concept of marketing in higher education may have only emerged within the last 30 years, marketing principles and recruitment create an excess of various recruitment materials and techniques. Patricia Bromley and Joan Fischer (2000) state that "in the business of higher education, students are the primary consumers, education is the primary product, and promotional materials are the initial sales materials" (para. 1). These promotional materials are the main focus of this study.

Publications

Promotional material, or awareness materials, sent to prospective college students can include a variety of printed publications such as: letters from admissions personnel or departmental heads, catalogs, promotional videos, and viewbooks. As marketing in higher education has become more popular in the last thirty years, a marketing-based approach to recruitment publications is also a popular idea. Robert A. Sevier (1990) outlines five basic reasons why publications are excellent marketing tools. First, a publication offers absolute control over the quality of the message. The design, typography, photography, copy, paper stock, and illustration are all determined by the college and allow the school to give their publication a special look, feel, and tone. Second, the college or university can control the timing of the message—when exactly it is sent to the student. Third, the publications are permanent. Unlike radio or television's fleeting message, publications can be looked at over and over again. Fourth, publications can be highly personal. Finally, publications allow one to segment the audience demographically so that specific publications can go to a specific type of student (p. 23).

The effectiveness of printed recruiting material has been moderately studied over the past 30 years. Studies have generally employed survey procedures and focused on how admission professionals view the effectiveness and accuracy of printed materials, the importance students assign to these materials and evaluations of the materials themselves (Chapman, 1981).

A study by Robert Sevier (1987) asked students how they first learned about the college or university they were currently attending. The most frequently cited sources of initial information about a school came from friends and family, but college recruitment publications and college guide books were the third and fourth most important sources of information. This survey also discovered that 39.3% of respondents ranked "correspondence from college" as a very influential factor in college choice (p. 48). Students found search information extremely valuable in many respects. The study showed that "10.9 % of them said that search mailings actually introduced them to the college they now attend" (Sevier, 1987). The respondents praised search materials for getting them acquainted with a variety of institutions.

Another study conducted by Project CHOICE and the National Association of College Admissions Counselors surveyed college admissions officers and high school guidance counselors concerning the effectiveness of commonly used recruiting activities and the activities they thought students relied on most. Results showed that catalogs and informational brochures are considered to be among the five admissions practices students rely on most in making a college decision (Chapman, 1981).

Researchers working on one study interviewed college freshmen about the effectiveness of promotional material. Students indicated that they did not select a college based on reading its brochures; however, students said they read the printed materials primarily to "confirm decisions they had made already on other grounds" (Chapman, 1981).

A study by Johnson and Chapman (1979) investigated the reading difficulty level of a national sample of college recruitment literature and the ability of college-bound high school students to understand the terminology used in college admissions brochures.

The authors found that the average reading level of the materials they examined was appropriate for an advanced college student or college graduate, not high school students.

The Current Study

This study will focus primarily on viewbooks which are the most commonly distributed printed promotional tool. The historical purpose of the viewbook "has been to foster student-college relationships, thereby helping both parties to achieve their goals in a given recruiting season" (Durgin, 1998). A viewbook is used as a communication vehicle to influence the communication between colleges and prospective students. Viewbooks are designed with several functions in mind. They are created in "an effort to hope to match the needs of students by conveying current attributes and describing a future that will become reality for those students who are accepted and who choose their college" (Durgin, 1998). They create a connection between students and colleges through written communication. A personal interview conducted by Kerry Durgin with Richard G. Di Feliciantonio, Vice President for Enrollment Services, Ursinus College, revealed that viewbooks "'provide an accurate and attractive context within which the important job of distinguishing among college options can be successfully accomplished by prospective students'" (p. 25). Both students and colleges recognize that a promotional publication's function is "to encourage certain types of students to take positive action toward certain types of colleges" (Durgin, 1998).

Viewbooks can also help attain and facilitate the public relations recruiting goals of a university (Durgin, 1998). The union of higher education adopting marketing and business principles as mentioned previously suggests that college admission offices' business goals of yielding a quota of freshmen is now related more closely to the public relations goals of the university. This makes the viewbook a "prevalent symbol of this evolution" (Durgin, 1998).

Colleges and universities may create their viewbooks internally or they may choose to use a marketing or public relations firm to design and create their viewbooks. Hundreds of hours are spent every year designing and distributing viewbooks. A study by J. Miguel Esteban and Chalice J. Apel (1992) looks at college direct mail marketing. The researchers requested information from 330 public and private colleges and universities. The most commonly received items in percentage of schools sending were: admissions applications, 96%; viewbooks, 80%; and letters, 61%. This study shows viewbooks are a common information piece distributed by colleges and universities.

The study continues with a detailed description of the profile of the average viewbook received. It took an average of 27 days after information was requested to receive a viewbook from the college or university. The average viewbook had four color cover printing and four color text. The average size was eight and a half inches by eleven inches and was approximately 38 pages in length. The authors described the cover design as not distinctive. The average cover feature was a scene of the campus or students on campus. The average orientation/tone was self-centered meaning that the viewbooks show "little or no attempt to engage or relate to the reader (Esteban & Apel, 1992).

Design of College/University Viewbooks

There are three basic elements involved in visual communication. The creator must understand the audience—the people who will be using the document including who they are and what they know about the subject. The creator must also understand the purpose of the document—what you want it to accomplish, persuade your readers to think or act a certain way, change their attitude, and so on. Finally it is necessary for the creator to consider the context—the circumstances in which readers will use the document (Kostelnick 1988). The design of a publication should shape its visual language so that it fits these three elements.

All design has structure; with this comes order and meaning which enables one to cope with the piece (Turnbull 1980). A layout or ordering process puts the various elements involved in a visual form. It is important to remember the ideas or context of the publication and the symbols that will be used to represent those ideas. The number of elements should be considered along with the order of presentation and the importance of the information in the elements (Turnbull 253).

The design of college and university viewbooks is critical to the institution's recruiting process. Viewbooks have become "metaphors for the essence of the institutions . . . there can be no one right choice of style for viewbooks as long as there is an understanding of the audience" (Martino 1995). The primary goal of a viewbook must be to get students reading (Worley 1996). Esteban and Apel (1992) state that "institutions have a calling to develop viewbooks that present a strong, honest sense of the school's character in a language most appropriate for their prime prospects" (p. 25).

The idea of image is critical in designing a recruiting brochure. High school students have an image in their minds of what it means to go to college or be a college student. These images develop from years of watching television and movies, as well as from experiences of parents, teachers, and friends (Anderson 1994). Because of these images, it is necessary for a college or university to provide concrete evidence of what it means "to be a student" at their university. The viewbook is the vehicle with which to present this image.

Words and pictures are the two main elements involved in designing a viewbook. Theme, paper size, and color are also heavily involved in creating a viewbook that will be read by high school students. Esteban and Apel (1992) describe the viewbooks they received during their study of college direct mailings. They described the "kaleidoscope of smiling faces, ionic columns, embossed seals, and brick walkways" as viewbook cover recipes. The most common "recipe" involved a "group of students (with at least one minority represented) standing on the stairs of Founder's Hall chatting with a professor. There's a school folder and bookbag strategically placed under one guy's arm, one of the girls is wearing an extra large university sweatshirt, and it's all smiles" (p. 24). Out of the 80% of viewbooks they received, the authors only categorized 8% of the brochures as distinctive, adding a different twist on a "recipe" or an unusual combination of "recipes" (p. 25).

The language used in viewbooks is an intricate part of the recruiting brochure. The Esteben and Apel (1992) study categorized viewbooks orientation/tone into four categories: user-centered, high user, moderate to low user, and self-centered. The user-centered viewbooks were designed and written with the reader in mind. They tended to use bios/profiles of students, teachers and alumni along with conversational easily read copy, and interesting captions (p. 25-26). David R. Treadwell and Jane Eblen Keller (1991) state that a focus group of college freshmen said they liked "neat, short chunks of information" (p. 26). They also like lists, and simple direct sentences. Don F. Stout and Maggi Channell (1987), both of Ohio University, wrote an article about the recruiting material they designed when applications were down. They used a casual, informal style with contractions and first and second person sentences. The copy was developed from the prospect's view and focused on what students wanted to know, not what the university wanted to tell them (p. 29). Wendy Ann Larson in her article "As Good As Your Word" (1990) states that "good writing is when the words communicate with the effortlessness of a casual conversation with a friend . . . words shouldn't get in the way of the thoughts being conveyed, but rather they should be precise enough to let ideas shine through with crystal clarity" (p. 43).

Photographs are another key design element in the creation of a college/university viewbook. Many articles describe the common photographs used in viewbooks. Joe Sugarman (1996) describes the pictures as "standard romantic photographs of the campus . . . the shot of smiling students on a cloudless day, lounging by the lilting willow" (p. 19). A strong cover photo will attract attention. It can express more about the college or university than any amount of text in a recruiting brochure. Focus groups conducted in a study by Treadwell and Keller (1991) indicate that students like lots of big, clear, lively, color photos (p. 24). Photos found in viewbooks must be honest and believable in the way they portray the university. They should be shown in their natural settings in the types of things the individual college offers (Treadwell & Keller, 1991). In order for a viewbooks' photographs to influence a student, the people must be identifiable. Richard Canterbury's study (1989) of his daughter's college mailings revealed that the photographs robbed the campuses of "any sense of spontaneity . . . the places and the people are too neat, too pretty, and too inanimate to be credible" (p.14).

Another common element in the designing of viewbooks is the taglines or slogans that accompany the recruiting brochure. Slogans such as "A Heritage of Excellence," "Education with a Future," and "A Commitment to Excellence," are generalizations which are confusing and unbelievable to students (Esteban & Apel, 1992). All campuses have "state-of-the-art" facilities or "exceptional and diverse" student bodies, but it is important for viewbooks to explain who their institution really is, the students who really attend, and the professors who really teach. The design of college or university viewbooks must focus on the "identifying characteristic or distinguishing strength of an institution and projecting that strength to prospects who value it" (Esteban & Apel, 1992).

METHODOLOGY

An experimental design was used for this study to determine the impact of the publication design of a college viewbook on a prospective student. The experimental method of research is one of the oldest approaches in mass media research. The experimental method allows for greater control in the research process. In this case, the researcher was able to control the viewbooks that were created so that only one element was manipulated. Also, the questionnaire was administered in the schools, a natural, unobtrusive environment. Controlled variation strengthens internal validity and helps eliminate confounding influences. In this experiment, the experimental method allows the students to actually see examples of viewbooks and determine which viewbook designs spark a greater interest or a certain opinion concerning that college/univeristy.

Research Questions

This study explored the following questions involving the design of college viewbooks and its impact on high school juniors.

RQ1: Does the design of a college viewbook create a greater interest for high school students in that school?

RQ2: Does the design of a college viewbook cause a high school student to want more information concerning that school.

RQ3: What opinions of a college are made because of the design of a viewbook?

Five hypotheses were also formulated and tested. The first three hypothesis are based primarily upon the article, "How Much, *Really*, Do Words and Images Matter in the Student-Recruitment Process?" by David Treadwell and Jane Keller (1991). While the authors did not explain in detail their research method, they did use a focus group of students to make their conclusions. In regard to H1, Treadwell and Keller (1991) state that students like "neat, short chunks of information . . . brief, direct and clear [writing]" (p. 26). In reference to both H2 and H3, Treadwell and Keller (1991) said that students like "plenty of big, clear, lively, color photos" (p.24). The last hypothesis was based upon several research articles relating to viewbook photography. The most prominent was Esteban and Apel's article (1992) which used a content analysis to study viewbooks and discovered dominant viewbook cover "recipes." Two of the most widely used types of photographs were of campus scenes such as an academic building or campus environment or people on campus such as a group of students (p. 25)

H1: Students prefer very little text on a viewbook page.

H2: Students prefer several pictures on a page rather than just one.

H3: Students prefer color photos rather than black and white.

H4: Students prefer pictures of people, current students on campus, rather than photographs of buildings.

RQ4: Do students have a preference concerning the page orientation of a viewbook.

Subjects

Two hundred and thirty-eight high school students were selected from three of the four high schools in a moderate-sized (pop. 200,000) Southwest city. The contact person at the fourth high school did not respond to several inquiries for participation in the experiment. Respondents were surveyed during a speech or communications application course. The high school courses are required of all students in all of these schools. Freshmen students are not allowed to take the speech course, so the students are a combination of sophomores, juniors, and seniors. This class was chosen because of the variety of students that could be sampled. The course offered a mix of ages and grade levels. Three or four classes were surveyed at each of the three schools. The age of students who completed the questionnaire ranged between 15-19. Seventy-eight respondents were 15 years old; 68 were 16 years old; 61were 17 years old; 30 were 18 years old; and one was 19 years old. The majority of subjects were non-Hispanic, white totalling 133 students. Twenty-two students were African-American, 71 were Hispanic, four were Asian, and eight designated "other" as their race.

Procedure

Respondents were given a booklet containing mock college viewbook pages (see Appendices A & B). Five elements were portrayed in the booklets including: percentage of text per page, number of pictures per page, color versus black and white photographs, campus scene photos versus pictures of people, and page orientation. A questionnaire was developed concerning each of the pages and distributed with the booklet. Respondents were asked about visual appeal, opinions about the portrayed school, and questions concerning interest level in the school. They were then asked the following demographic questions: age, gender, race, college plans, and whether they had received viewbooks.

Stimulus Material

College viewbooks and recruiting brochures were gathered from various colleges across the nation. The researcher categorized the viewbooks based primarily on the content analysis of viewbooks conducted by Esteban and Apel (1992). This gave the researcher a better understanding of the types of viewbook distributed by colleges and universities and the design and look of the viewbooks. Esteban and Apel (1992) described the covers of the viewbooks as primarily a campus scene or campus people—a photo or illustration in which the focus is divided between the campus and its people (p.

25). They also described the common photograph "recipe" in viewbooks as "a group of students (with at least one minority represented) standing on the stairs of Founder's Hall chatting with a professor . . . there's a school folder and bookbag strategically placed under one guy's arm, one of the girls is wearing an extra large university sweatshirt" (p. 24). Out of the viewbooks evaluated in the content analysis, the authors only categorized 8% of the brochures as distinctive (p.25).

The researcher also used information from a study by Treadwell and Keller (1991). A focus group was conducted asking students their opinions about the design and text of college viewbooks. Students said they liked "lots of big, color photos" and "neat, short chunks of information" (p. 24-26). These studies were the primary basis for categorizing and evaluating the faux viewbooks.

The studied elements included: percentage of text per page, number of pictures per page, black and white versus color photographs, campus scenes versus photographs with people, and page orientation. For each element, two identical viewbook pages were created with only the treated element altered.

In order to create the viewbooks, a variety of photographs were scanned from the gathered viewbooks. A headline and text were also copied from a viewbook. These pictures and text were used throughout the mock pages. The text was taken from the Rockhurst University viewbook. The headline said, "You *can* take it with you. Your Rockhurst experience that is." The text continued along this line with a list of possible experiences one would encounter at Rockhurst University. The viewbooks used as the school name, Thurmond, which is not a known name of a United States college or university. The researcher conducted a search on the Internet to determine whether Thurmond was the name of a college/university.

The first experimental manipulation involved the percentage of text on a page. The pages contained two pictures; one of three women walking under a tree, the other of three men talking outside. The layout is exactly the same. Both pages have the headline and introduction part of the text, but one page has two more full paragraphs of text and the other page is blank (see Appendices A & B for all manipulations).

The second experimental manipulation involved the number of pictures on each page. Both pages have the same headline and the same amount of text. One of the pages has three pictures: a group of students eating, a student graduating, and a student painting. The other page looks exactly the same except the picture of the group and the student painting are removed (see Appendices A & B).

The third manipulation studied dealt with color photographs versus black and white photos. These two pages look exactly the same and contain two pictures: a girl sitting at a computer and a boy and girl with backpacks smiling. One page has color pictures and the other has black and white (see Appendices A& B).

The fourth experimental manipulation involved the use of a campus scene versus a photograph with people. These two pages are exactly the same, the picture sizes are equal and the text is in the same place. One of the pages has two pictures of buildings on campus, while the other page has students posing for the camera and playing in the snow (see Appendices A & B).

The final manipulation dealt with page orientation. These pages use the same three pictures and the same amount of text. The horizontal page is arranged as similar to the vertical page as possible. These pages will help determine whether students have a preference concerning page orientation (see Appendices A & B).

The pictures used in the mock viewbook pages were scanned and edited using Adobe PhotoShop and the viewbook pages were created in Adobe PageMaker. The pages were based on designs found in the gathered viewbooks and copied in color. Booklets were created with and photocopied in color in order to create a more believable and realistic viewbook page.

A questionnaire was developed at this point, which asked questions concerning visual appeal, opinions about the school, and interest level in the university. The questionnaire consisted of seven statements, rated on a seven point scale from strongly disagree (1) to strongly agree (7). Each of the seven items about the five different faux viewbook pages was presented to the students. They were asked to look at the viewbook page and circle the number they wanted to select. Statements included: This is a good looking page. This school seems very academic. This school seems like fun. This page makes me want more information from this school. This page is unattractive. I would like to visit this college. I would be interested in this college (see Appendix C).

Demographic questions were placed at the end of the survey. Students were asked their age, gender, and race. They were also asked about their college intentions, if they had applied, and whether they had received any viewbooks from colleges or universities (see Appendix C).

RESULTS

The data were analyzed using Microsoft Excel. Descriptive statistics were calculated for each item along with the demographic questions. T-tests were also performed to analyze the means for each of the seven items for all of the five mock viewbook pages. The t-tests compared the averages of the responses for the two different versions. Results of the t-test were evaluated and determined statistically significant if the P value was < .05.

There was a total of 238 respondents. One hundred and twenty six of the respondents were male, and the remaining 112 were female. Respondents ranged in age from 15-19 (see Table 1). Respondents were also asked to classify their race as one of five categories (see Table 2).

Table 1. Demographics of respondents' ages

	# of students	% of students
15 year olds	78	32.77%
16 year olds	68	28.57%
17 year olds	61	25.63%
18 year olds	30	12.61%
19 year olds	1	0.42%

Table 2. Demographics of respondents' race

	# of students	% of students
Non-Hispanic white	133	55.88%
African-American	22	9.24%
Hispanic	71	29.83%
Asian	4	1.68%
Other	8	3.36%

Students were also asked four questions regarding future college plans (see Appendix C). First they were asked if they planned to go to college. Next, students were asked if they plan to go to college right after high school graduation. Students were also asked if they had already applied to a college or colleges, and finally if they had received any viewbooks from colleges/universities (see Table 3).

Table 3. Responses to questions concerning future college plans and communication

	Yes	No	Maybe
Do you plan to go to college?	214	19	5
Do you plan to go to college right after high school gradutation?	167	67	4
Have you already applied to a college or colleges?	40	198	
Have you received any viewbooks from colleges/universities?	98	140	

Students were given either version A (see Appendix A) or version B (see Appendix B) of the viewbook packets along with a questionnaire containing seven items in reference to each page of the viewbook packet. In total, each student responded to 35 items. Each research question and hypothesis will be presented with the appropriate results. Students responded to each item based on a 7-point scale from 1, strongly disagree, to 7, strongly agree.

RQ1: Does the design of a college viewbook create a greater interest for high school students in that school?

Students were asked to respond to two items in regard to RQ1. Students were asked if by looking at the page, "I would like to visit this college" and "I would be interested in this college." Both of these items attempt to measure the interest level students have in that school based upon the viewbook version they were given.

The first viewbook page evaluated the amount of text on the page. There was no statistical difference between the two versions of viewbook pages when manipulating the amount of text (t=.39, dF= 236, p=.70) (see Table 4). The second viewbook element studied, the number of pictures per page, showed a statistically significant difference (t=4.21, dF=236, p=.00003) (see Table 4) in the interest level of students based on the number of pictures on the viewbook page. Students preferred the viewbook page with three photos over the page with only one. The third viewbook element studied, color versus black and white photographs, was not statistically significant in regard to the interest level of high school students in that college/university (t=-.91, dF=236, p=.36) (see Table 4). Results from the fourth viewbook element studied showed a statistical difference between the two versions of viewbook pages when manipulating the types of pictures used (t=-2.27, dF=236, p=.02) (see Table 4). Respondents were more interested in the college that used photos of students rather than buildings. There was no statistical difference, regarding the interest level of high school students, between the two mock viewbook pages when manipulating the page orientation (t=-.71, dF=236, p=.48) (see Table 4).

Table 4. Comparison of responses to the statement "I would like to visit this college"

	Version A mean	Version B mean	t value	dF	p value
Text	4.06	3.98	0.39	236	0.7
No. of photos	4.77	3.97	4.21	236	0.00003
Color vs. B&W	4.05	4.23	-0.91	236	0.36
Photo type	4.61	5.08	-2.27	236	0.02
Orientation	4.55	4.69	-0.71	236	0.48

(For a discussion of negative t-values, see Wimmer &Dominick, 1991, pp. 239-40.)

The second question posed concerning RQ1, "Does the design of a college viewbook create a greater interest for high school students in that school?" asked students to respond to the statement, "I would be interested in this college." This item also addresses the interest level of a student in a certain college based on the viewbook page they were given.

There was no statistical difference between versions A and B of the mock viewbook pages when manipulating the amount of text per page (t=.43, dF= 236, p=.67) (see Table 5). The second viewbook element, the number of pictures per page, showed that there was a statistically significant difference (t=4.22, dF=236, p=.00003) (see Table 5) in the interest level of students. Respondents favored the page with several photos on the viewbook page. The responses to the third viewbook element studied, color versus black and white photographs, were not statistically different between the two versions of viewbook pages (t=-1.26, dF=236, p=.21) (see Table 5). Results from the fourth viewbook element studied, pictures of students versus pictures of campus scenery, showed a statistical significance (t=-2.54, dF=236, p=.01) (see Table 5) in the interest level of students in regard to the different viewbook versions. Students showed a greater interest in the college that used photographs of students rather than buildings. There was not a statistical difference between the two versions of pages when manipulating page orientation (t=-.89, dF=236, p=.37) (see Table 5) regarding the interest level of high school students.

Table 5. Comparison of responses to the statement "I would be interested in this college."

	Version A mean	Version B mean	t value	dF	p value
Text	3.98	3.89	0.43	236	0.67
No. of photos	4.72	3.92	4.22	236	0.00003
Color vs. B&W	3.97	4.21	-1.26	236	0.21
Photo type	4.36	4.91	-2.54	236	0.01
Orientation	4.49	4.66	-0.89	236	0.37

The second research question addressed in this study dealt with whether the design of a college viewbook would influence a student to want more information concerning that school. The questionnaire presented the statement, "This page makes me want more information from this school," to which students responded on a 7-point scale (see Appendix C). The students responded to this same item in regard to the five viewbook pages they evaluated.

> RQ2: Does the design of a college viewbook cause a high school student to want more information concerning that school?

There was no statistical difference between the two versions of viewbook pages when manipulating the amount of text per (t=.89, dF= 236, p=.38) (see Table 6). Responses to the second viewbook element studied showed a statistically significant difference (t=4.17, dF=236, p=.00004) (see Table 6) between the two mock viewbook versions when manipulating the number of pictures per page. Respondents wanted more information from the college that used three photos in their viewbook page. The third viewbook element manipulated was color versus black and white photographs. There was no statistical difference between these two versions of viewbook pages (t=-1.48, dF=236, p=.14) (see Table 6). Results from the fourth viewbook element studied, pictures of students versus pictures of campus scenery, did not show a statistical significance between the two mock viewbook versions (t=-1.63, dF=236, p=.10) (see Table 6) in the desired information about a college/university. There was no statistical difference, regarding the interest level of high school students, between the two viewbook, versions when manipulating page orientation (t=-1.05, dF=236, p=.29) (see Table 6).

Table 6. Comparison of responses to the statement "This page makes me want more information from this school"

	Version A mean	Version B mean	t value	dF	p value
Text	4.09	3.91	0.89	236	0.38
No. of photos	4.92	4.16	4.17	236	0.00004
Color vs. B&W	4.03	4.3	-1.48	236	0.14
Photo type	4.6	4.93	-1.63	236	0.1
Orientation	4.52	4.71	-1.05	236	0.29

The third research question addresses the opinions a student may develop based on the design of a viewbook.

RQ3: What opinions of a college are made because of the design of a viewbook?

The questionnaire presented two items in regard to RQ3. Students were asked if by looking at the viewbook page they felt that, "This school seems very academic" and they were asked if they felt that "This school seems like fun" (see Appendix C). Both of these items address two different opinions of a college/university. Once again, these items were presented in a 7-point scale from "strongly agree" (7) to "strongly disagree" (1). Results for the statement "This school seems very academic" will be presented first.

There was no statistical difference between the two versions of the pages when manipulating the amount of text per page (t=1.77, dF= 236, p=.08) (see Table 7). There was also no statistical difference regarding students' opinions about how academic a college seems, between the two viewbook versions when manipulating the number of pictures per page (t=-1.38, dF=236, p=.17) (see Table 7). The third viewbook element studied, color versus black and white photographs, showed a statistically significant difference between the two viewbook versions (t=-2.38, dF=236, p=.02) (see Table 7). The viewbook page with black and white photographs was considered more academic by students than the page with color photos. Results from the fourth viewbook element manipulated, pictures of students versus pictures of campus scenery, also showed a statistical significance (t=4.06, dF=236, p=.00006) (see Table 7) in the opinion of students in regard to how academic the school seemed based on the viewbook page. Respondents considered the page with photos of campus scenes more academic. There was a statistical difference between the two versions of pages when manipulating page orientation (t=-2.03, dF=236, p=.04) (see Table 7). Students' opinions concerning page orientation revealed that the vertical orientation was perceived as more academic.

Table 7. Comparison of responses to the statement "This school seems very academic"

	Version A mean	Version B mean	t value	dF	p value
Text	5.04	4.72	1.77	236	0.08
No. of photos	5.06	5.32	-1.38	236	0.17
Color vs. B&W	4.47	4.89	-2.38	236	0.02
Photo type	4.95	4.12	4.06	236	0.00006
Orientation	4.34	4.71	-2.03	236	0.04

The second item presented in the questionnaire in reference to RQ3 stated, "This school seems like fun" (see Appendix C). This item also addresses the research question, "What opinions of a college are made because of the design of a viewbook?"

There was no statistical difference between versions A and B when manipulating the amount of text per viewbook page (t=.79, dF= 236, p=.43) (see Table 8). A statistical difference was found between the two viewbook versions when the number of pictures per page was manipulated (t=7.34, dF=236, p=.00345) (see Table 8). The page with three pictures was considered more fun by respondents than the page with only one photo. There was also a statistical difference, concerning students' opinions of how fun a college/university seems, between the two mock viewbook pages manipulating color and black and white photographs (t=-2.83, dF=236, p=.01) (see Table 8). Respondents thought the college that used black and white photos seemed like more fun. Results from the fourth viewbook element manipulated, pictures of students versus pictures of campus scenery, showed a statistical significance between the two mock pages (t=-10.37, dF=236, p=.00541) (see Table 8). Respondents considered the college whose viewbook page used photographs of students on campus more fun than the college viewbook with photos of buildings. There was no statistical difference between the two versions of the pages when manipulating the page orientation (t=0, dF=236, p=1) (see Table 8).

Table 8. Comparison of responses to the statement "This school seems like fun"

	Version A mean	Version B mean	t value	dF	p value
Text	4.46	4.3	0.79	236	0.43
No. of photos	5.4	4.08	7.34	236	0.00345
Color vs. B&W	4.24	4.74	-2.83	236	0.01
Photo type	4.24	6.01	-10.37	236	5.41E-05
Orientation	5.22	5.22	0	236	1

The remaining research question and hypotheses address the student preference of the viewbook elements evaluated in this study. Hypotheses 1-4 and research question 4 address the preference between version A and version B of the viewbook pages. The first hypothesis looks at how much text students prefer on a viewbook page. This hypothesis is based primarily upon an article by Treadwell and Keller (1991) which states that students prefer "neat, short chunks of information" (p. 26).

H1: Students prefer very little text on a viewbook page.

The questionnaire presented two items in regard to H1. Students were first asked to respond to the statement "This is a good looking page." Once again, this was addressed on a 7-point scale from strongly disagree to strongly agree. Later in the survey they were asked to respond to the statement "This page is unattractive" (see Appendix C). Results for the statement "This is a good looking page" will be presented first.

The first element manipulated looked at whether students had a preference concerning the amount of text per viewbook page. When presented with the statement, "This is a good looking page," there was no statistical difference between the two versions of pages when manipulating the amount of text (t=.79, dF= 236, p=.21) (see Table 9). The second statement, "This page is unattractive," found that once again there was no statistical difference between the two mock viewbook pages (t=.27, dF= 236, p=.39) (see Table 9).

Table 9. Comparison of responses to the statements "This is a good looking page" and "This page is unattractive" concerning the amount of text per viewbook page

	Version A mean	Version B mean	t value	dF	p value
Good looking page	4.93	4.81	0.79	236	0.21
Unattractive page	3.09	3.04	0.27	236	0.39

The second hypothesis addressed the second element studied, the number of pictures per page (see Appendices A and B). This hypothesis was also based upon the Treadwell and Keller article (1991) which stated that students like "lots of big, clear lively" photographs on viewbook pages (p. 24).

H2: Students prefer several pictures on a page rather than just one.

As in the first element studied, the questionnaire presented two items in regard to H2. Students were asked to respond to the statement "This is a good looking page." Later in the survey they responded to "This page is unattractive" (see Appendix C).

When the number of pictures were manipulated, results showed that there was a statistical difference in the responses to the two items. The response to the statement, "This is a good looking page," was statistically significant (t=2.83, dF=236, p=.002) (see Table 10). The second statement, "This page is unattractive," also showed a statistically significant difference (t=-2.58, dF=236, p=.01) (see Table 10) in the respondents' opinions of the design of the viewbook page. Respondents preferred the viewbook page that used three photographs rather than the page that only used one.

Table 10. Comparison of responses to the statements "This is a good looking page" and "This page is unattractive" concerning number of pictures per viewbook page

	Version A mean	Version B mean	t value	dF	p value
Good looking page	5.55	5.03	2.83	236	0.002
Unattractive page	2.54	3.05	-2.58	236	0.01

The third hypothesis looked at whether students prefer color photographs or black and white photographs (see Appendix A and B). Treadwell and Keller's (1991) article suggested students like color photographs more than black and white photos in viewbooks (p. 24)

H3: Students prefer color photos rather than black and white.

The questionnaire once again presented two items in regard to H3 that were measured on the 7-point scale. Students were first asked to respond to the statement, "This is a good looking page," and then they were asked to respond to the statement "This page was unattractive" (see Appendix C).

There was no statistical difference, in reference to the statement "This is a good looking page," between versions A and B of the pages when manipulating the color of the photographs (t=-.04, dF= 236, p=.48) (see Table 11). The second statement said, "This page is unattractive." Results showed that there was not a statistical difference between the two versions (t=.93, dF= 236, p=.18) (see Table 11).

Table 11. Comparison of responses to the statements "This is a good looking page" and "This page is unattractive" concerning color photos versus black and white

	Version A mean	Version B mean	t value	dF	p value
Good looking page	4.4	4.4	-0.04	236	0.48
Unattractive page	3.49	3.29	0.93	236	0.18

The fourth hypothesis looked at whether students prefer photographs of people, students on campus, or photos of buildings (see Appendices A and B). This hypothesis was addressed by several researchers, including Esteban and Apel (1992) who categorized viewbook photography and discussed the use of "viewbook recipe" photographs (p. 24). The group of researchers suggested students like to see other students in photographs, not just the buildings on campus.

H4: Students prefer pictures of people, current students on campus, rather than photographs of buildings.

The same two statements were presented to the students in regard to H4 (see Appendix C). There was no statistical difference concerning the statement "This is a good looking page," between the two versions of the pages when manipulating the types of photographs used (t=-1.11, dF= 236, p=.13) (see Table 12). The second statement said, "This page is unattractive." Results showed that there was a statistical difference in the opinion of the types of pictures manipulated on the two viewbook versions (t=1.88, dF= 236, p=.03) (see Table 12). The viewbook page with photographs of campus buildings was considered more unattractive by respondents than the page with photos of people.

Table 12. Comparison of responses to the statements "This is a good looking page" and "This page is unattractive" concerning pictures of people, current students on campus, rather than photographs of buildings

	Version A mean	Version B mean	t value	dF	p value
Good looking page	5.48	5.68	-1.11	236	0.13
Unattractive page	2.87	2.45	1.88	236	0.03

The final element studied, students' preferences of page orientation, addressed research question four (see Appendix A and B).

RQ4: Do students have a preference concerning the page orientation of a viewbook?

The same two statements, "This is a good looking page" and "This page is unattractive," that were previously asked in regard to H1-H4 were presented to the students in regard to RQ4 (see Appendix C).

Respondents were presented with the statement, "This is a good looking page." There was no statistical difference between version A and B of the viewbook pages when manipulating page orientation (t=-1.47, dF= 236, p=.07) (see Table 13). The second statement said, "This page is unattractive." Results showed that there was a statistical difference between the two mock pages when manipulating page orientation (t=2.32, dF= 236, p=.01) (see Table 13). Respondents ranked the horizontal viewbook page as more unattractive than the traditional vertical page orientation.

Table 13. Comparison of responses to the statements "This is a good looking page" and "This page is unattractive" concerning page orientation of a viewbook page

	Version A mean	Version B mean	t value	dF	p value
Good looking page	4.98	5.24	-1.47	236	0.07
Unattractive page	3.16	2.7	2.32	236	0.01

DISCUSSION

Overview

This experiment addressed students' preferences concerning the design of college recruiting publications and whether the look of the publications altered high school students' interest level in that school. By creating mock viewbook pages that focused on five design elements (amount of text per page, number of pictures per page, color versus black and white photographs, campus scenes versus photographs of students, and page orientation), the researchers were able to ask students questions regarding their interest level in and opinions about the school along with whether they liked the design of the viewbook page. This experiment attempted to answer several questions and hypothesis regarding the design of college viewbooks. The following questions and statements were evaluated in this experiement:

1. Does the design of a college viewbook create a greater interest for high school students in that school?
2. Does the design of a college viewbook cause a high school student to want more information concerning that school?
3. What opinions of a college are made because of the design of a viewbook?
4. Students prefer very little text on a viewbook page.

5. Students prefer several pictures on a page rather than just one.
6. Students prefer color photos rather than black and white.
7. Students prefer pictures of people, current students of the campus, rather than photographs of building.
8. Do students have a preference concerning the page orientation of a viewbook?

The experiment included 238 high school students from three different schools in a moderate-sized (pop. 200,000) Southwest city. The students were shown one of two versions of mock viewbook pages and were asked to respond to a series of items based on a 7-point scale concerning their opinions about each page.

Summary and Analysis

The results from this experiment reflected several ideas found in past literature on the subject of the design of college recruiting publications. Previous studies, however, were based on focus groups and content analysis methods rather than an experimental design. This study also offered results from questions concerning interest level and opinions of the mock college students formed by looking at the viewbook pages.

The results from this study found that the interest level of students in the hypothetical college was significant in regard to two of the elements analyzed. Students were more interested in a college with multiple pictures on the viewbook page rather than just one. In both items measuring interest level ("I would like to visit this college" and "I would be interested in this college"), respondents liked the mock viewbook page that used three photographs more than the page that only used one (see Appendices A and B). One possibility for this difference is that students were able to see more of the college—both the students and the campus—when three pictures were used. One picture on the page limits the amount of the campus atmosphere that can be portrayed through photographs.

The other element that showed a significant difference in the interest level of students was pictures of people, current students on campus, rather than photos of buildings. Respondents were more interested in the college that used photographs of students on campus. This mock viewbook page had a photograph of students posing on campus and a photo of students playing in the snow. The other mock viewbook had two pictures of buildings on campus (see Appendices A and B). Students' interest level may increase in a college/university because they see other students involved in a variety of activities. High school students are also able to see the types of students at that college and more of a glimpse into college life.

The same two elements were found significant with regard to RQ2 (Does the design of a college viewbook cause a high school student to want more information concerning that school?) as the previous research question. Students once again responded that they wanted more information concerning the school that used three pictures on their viewbook page than the school that used only one picture. The same idea as previously mentioned could be suggested once again- students want to see more of the school that they might consider attending. The more pictures used, the better idea students can have about the college/university they are investigating.

And again, the other significant result showed that the use of photographs of students rather than campus scenery received a higher ranking. The use of pictures showing students on campus seems to appeal to high school students more in both their interest level in that college and their desire for more information concerning that school.

These results reveal that the amount of text on the page, the use of color or black and white photographs, and the orientation of the page are not significant to high school students concerning their interest level in and desire for more information from a college/university. It might be that when students are just evaluating their interest level they merely glance over the text on a page and primarily look at the photographs on the page. At this point in their decision-making process, they may not actually read the text about the college/university. The use of black and white photographs may not be significant since there are at least pictures on the page, and the page orientation may not make a strong statement to students since they are just glancing at the page. This idea would allow for the significance in the other two elements because students glance at the page and notice the number of photographs and the types of photos on the viewbook pages.

Students were asked to respond to two items concerning RQ3: What opinions of a college are made because of the design of a viewbook? They were asked if the college seemed like fun and if the college seemed academic. Results showed that the college using several pictures on its viewbook page was considered more fun by respondents than the college with only one photo. This could be because the viewbook page which used three pictures included a photo of students sitting around eating, a student graduating, and a student working at an easel. The types of pictures used could have influenced this result; when more than one photo is used on a page, a variety of campus settings can be shown.

Respondents also found that the viewbook page that used black and white photographs was ranked both more fun and more academic. This presents an interesting result. It is possible that the respondents found the use of black and white photographs different from the usual and thus rated them higher than the viewbook pages with the color photos.

The fourth element studied, pictures of students versus pictures of campus buildings, showed significant difference in students' opinions about the two versions. Results showed that students thought the viewbook version A, which used the photos of students, was considered more fun. Version B, which used the photos of the buildings, was considered more academic. Colleges/universities should choose pictures according to what type of image they want to present. The photographs give students an overall feeling of what the college is like, so colleges may want to present a variety of types of pictures in order to make their school seem diverse.

Results showed that the final element studied, page orientation, was significant in the students' opinions. Students found that version B, which used the vertical orientation, was considered more academic by students. This could be because it is the more traditional page orientation while the horizontal orientation presents a more nontraditional, different style of viewbook page.

The final hypotheses and research question address whether students preferred the design of one viewbook version over the other. Students were asked to respond to two items, "This is a good looking page" and "This page is unattractive." The reactions to these items show a preference of the overall design of the pages.

There are several research articles stating the importance of having very little text on a viewbook page. Surprisingly, results from this study show that students did not significantly prefer the page with little text. One explanation could be that students did not actually take the time to read the text, so they just looked over it and responded to the questionnaire.

The results showed that students significantly prefer a page with several pictures rather than just one. This was an expected result based on previous research by Treadwell and Keller (1991) that suggested a preference for "plenty of big, clear, lively photos" in a viewbook (p. 21). Throughout the set of items, students tended to prefer the viewbook page with three pictures rather than the page with just one.

Research by Treadwell and Keller emphasized the importance of the use of color photographs in viewbooks. Results here were once again surprising because respondents did not show a significant preference for color photography. One possibility for this is that students are used to seeing color photos, so the black and white photographs, because of the difference, make an impression.

The fourth hypothesis stated students were expected to prefer pictures of people, current students on campus, rather than photographs of buildings. Results were mixed for this hypothesis. The statement, "This is a good looking page," did not show a significant difference. However, the statement, "This page is unattractive," did show a significant difference. Students ranked version A with the pictures of buildings to be more unattractive than version B with the pictures of students. When looking at the overall design of the viewbook page, students may not have concentrated on the specific photographs. Another possibility for these findings is that students had trouble responding to the item, "This is an unattractive page," since it was presented as an opposite to the first item.

Results again varied between the two items asked in regard to page orientation–vertical vs. horizontal. A significant difference was not found with the first item, "This is a good looking page," but the second item, "This page is unattractive," did show a significant difference. Students found that version A, which ran horizontally, was more unattractive than version B, which was the traditional, vertical orientation. This may be because they had to turn the page in order to view it. As stated previously, students may have not accurately responded to the item.

Overall, these results have important consequences for colleges and universities that are creating recruiting materials. Students receive numerous viewbooks during their last years of high school, so it is critical for schools to create an aesthetically-pleasing publication that presents the desired image of the college and creates an interest in their school. This study presents some evidence about the preferences of high school students in certain design elements found in viewbooks.

The primary purpose of a college viewbook is to "foster student-college relationships, thereby helping both parties to achieve their goals in a given recruiting season" (Durgin, 1998). In order for a relationship to grow, students must develop an interest in the college/university. It is important for colleges/universities to use a number of pictures on each page rather than just one. Several pictures depicting a variety of college experiences appeal to students and sparks more of an interest than just one. This may be because students are able to identify with one of the photographs on the page. College and university administrators should also remember to use photographs of students rather than just pictures of campus buildings. Students want to see other students, not just the campus scenery. Respondents did not indicate a preference in either of the two versions of the other manipulated elements—amount of text per page, color versus black and white photos, and page orientation.

Another purpose of a viewbook is "to encourage certain types of students to take positive action toward certain types of colleges" (Durgin, 1998). The same two elements that were significant in developing a greater interest were important in respondents' desire for more information about a certain college/university. Students indicated that they wanted more information from the school that used three photographs on their viewbook page rather than just one. They also wanted more information from the school that used photographs of students instead of buildings. Once again, there was not a strong preference in regard to the other three elements manipulated.

Viewbooks, through their design, can present a strong image of their school. Esteban and Apel (1992) state that "institutions have a calling to develop viewbooks that present a strong, honest sense of the school's character" (p. 25). This study only looked at two different images, academic and fun, although a school could embody both of these images. Results showed that the more pictures on the page, the more fun the school seemed. The use of black and white photographs was found to be both more academic and more fun. It is important for administrators to remember that the use of black and white photos seems to make a statement to students. This could be because color is used more often, and the black and white photos are different from the norm. Administrators must choose the photographs they use in viewbooks carefully, because the pictures create an image in the prospective students' minds. Version A used photographs of buildings on a college campus. Students considered this school to be more academic, while version B, which used photos of students, was found to be significantly more fun. A college may want to mix the types of photographs they use in their viewbook, or choose the image they want to present to high school students and use pictures that represent that theme.

This study also determined students' preferences to five design elements used in college viewbooks—percentage of text per page, number of photographs, color versus black and white photos, pictures of students versus pictures of campus buildings, and page orientation. Surprisingly, students did not show a significant preference for the page with less text. The importance of using little text was an element frequently discussed by past researchers, yet this study does not show a preference. This could be because students were not told to actually read the pages, but rather just look at the pages. Colleges/universities should use plenty of photographs on their viewbook pages. The use of several photos was preferred throughout the entire study. It was also surprising that there was not a definite preference for color photos over black and white. As mentioned previously, college administrators may want to consider using black and white photos more often because they are different. They have a clean, classic look and may present a variety of images. A clear preference concerning basic design cannot be determined with the last two elements—types of pictures used and page orientation. One of the statements did not show a statistical difference while the opposing statement did. Students may have had trouble responding to the second item, "This page is unattractive" because it required a reverse answer.

Limitations of the Study

It must be noted that the present study has limitations and is by no means exhaustive. Respondents were all students in a moderate-sized (pop. 200,000) city in the Southwest, and they have been exposed to a Division I university in their city. This may have made them more aware of the college atmosphere and recruiting practices. Students may have had preconceived ideas about the college/university they want to attend which was reflected in their responses. The use of a fictitious university may have also influenced students because it was an unknown school. A broader age range may have also produced different results because over half of the respondents had yet to receive a viewbook.

There are also limitations in the stimuli. Even though color copies were made, respondents did not have an actual viewbook. They were told that this was a copy of a viewbook page, but authenticity is lost when an actual viewbook is not used.

Further Research

Research in the field of college recruiting publications is open. Very little quantitative research has been done in this field, and the qualitative research is constantly changing as trends and styles change in publications. More in-depth research could be conducted on each of the five elements studied in this project. A study could be done focusing on each of the elements, with more pointed questions. The use of open-ended questions might also produce interesting results concerning the preference and reasoning behind why students like certain pages better.

Students are beginning to use the Internet as their primary source for information about prospective colleges. This is an incredibly open field that could utilize much of the same information presented in this study. Basic design elements will stay consistent; however, the Internet presents much greater recruiting possibilities. Little has been reported in this area, but colleges/universities need to consider the design of their websites and the bearing that has on their recruiting.

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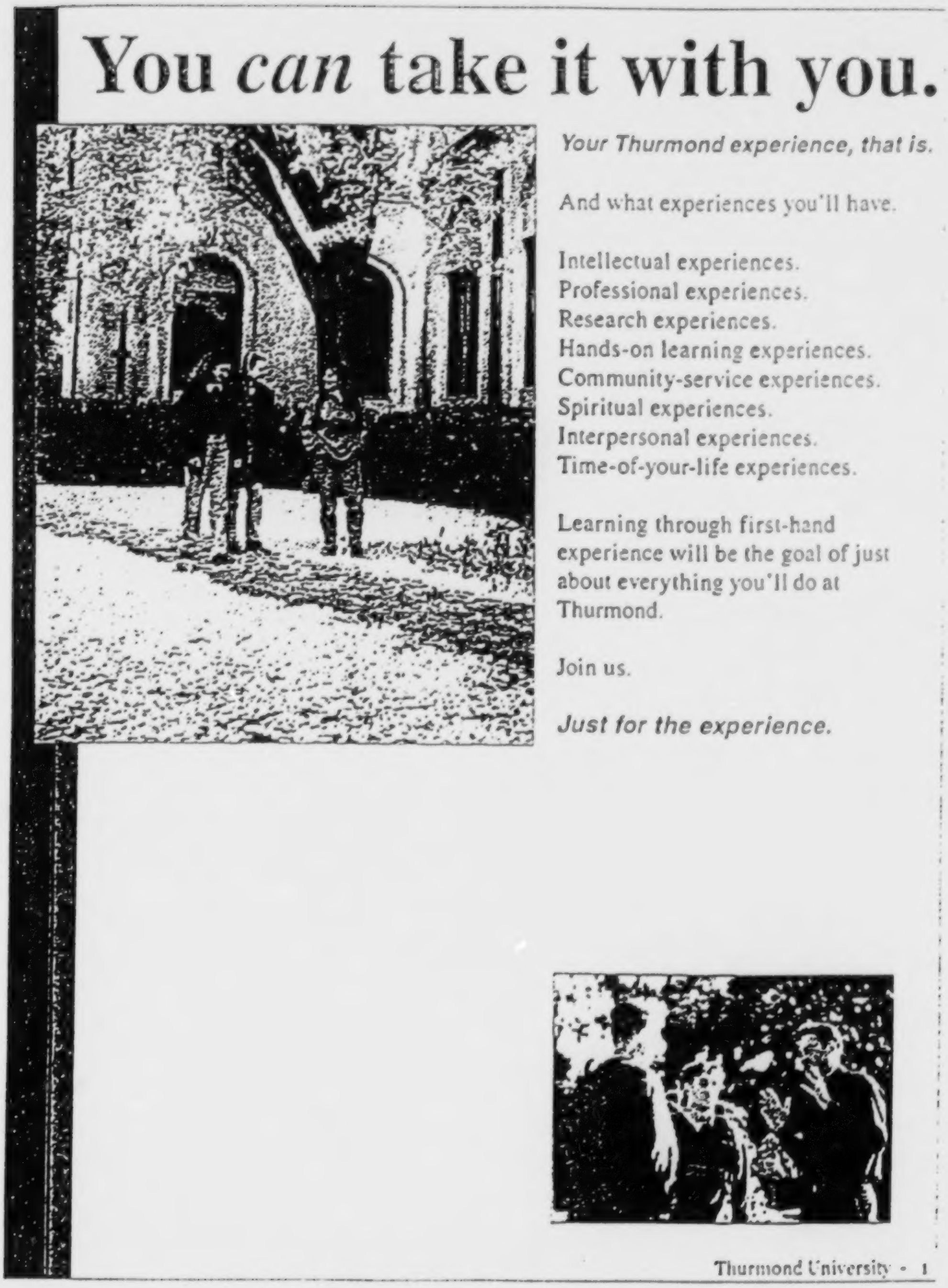
APPENDIX A

MOCK VIEWBOOK PAGES USED IN EXPERIMENT

VERSION A

NOTE! NO PAGES MISSING.

THESE PAGES PHOTOCOPIED FROM ORIGINAL, NON-EDITED COPY OF PAPER.



You *can* take it with you.

Your Thurmond experience, that is.

And what experiences you'll have.

Intellectual experiences.
Professional experiences.
Research experiences.
Hands-on learning experiences.
Community-service experiences.
Spiritual experiences.
Interpersonal experiences.
Time-of-your-life experiences.

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Just for the experience.

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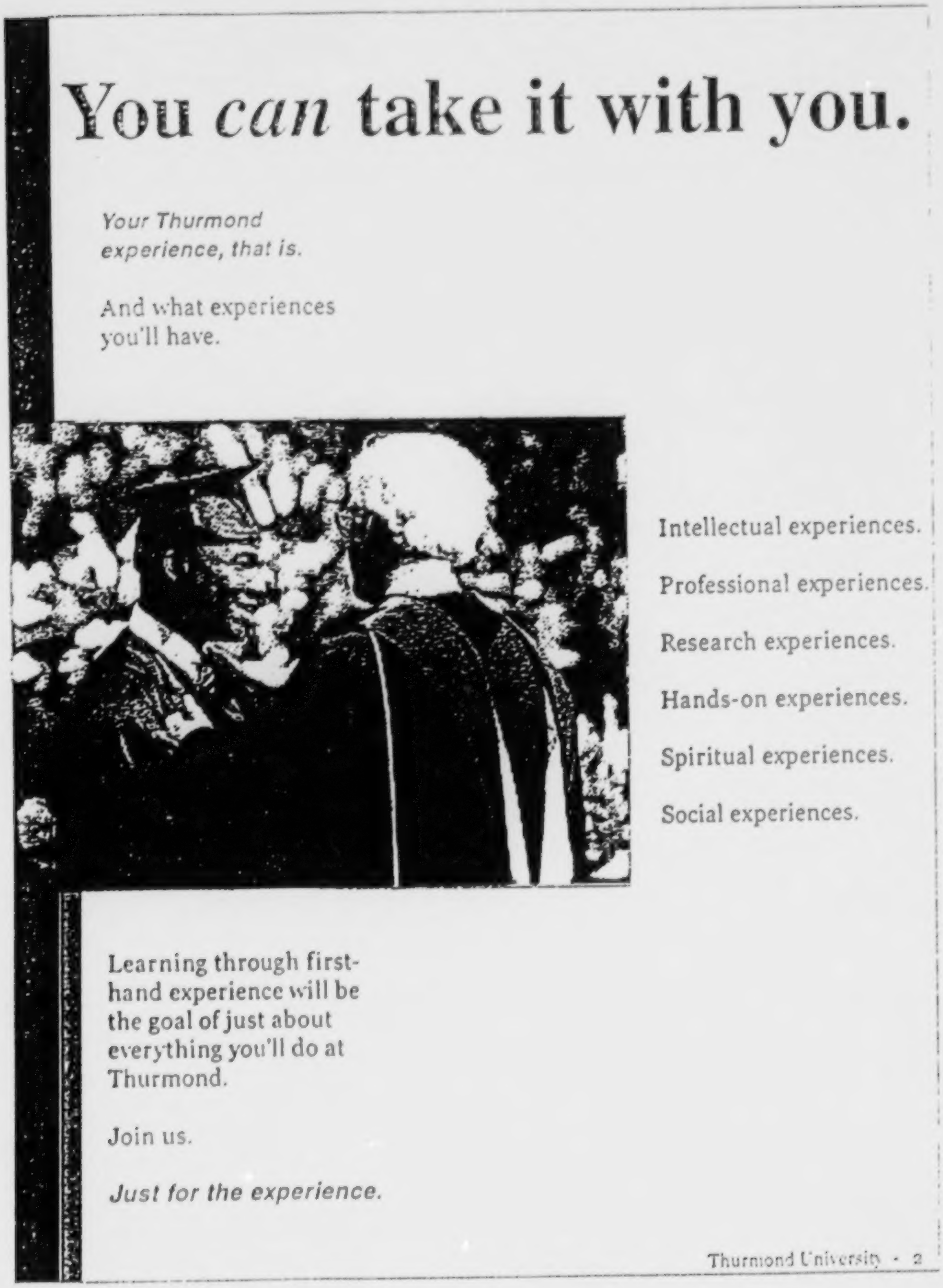

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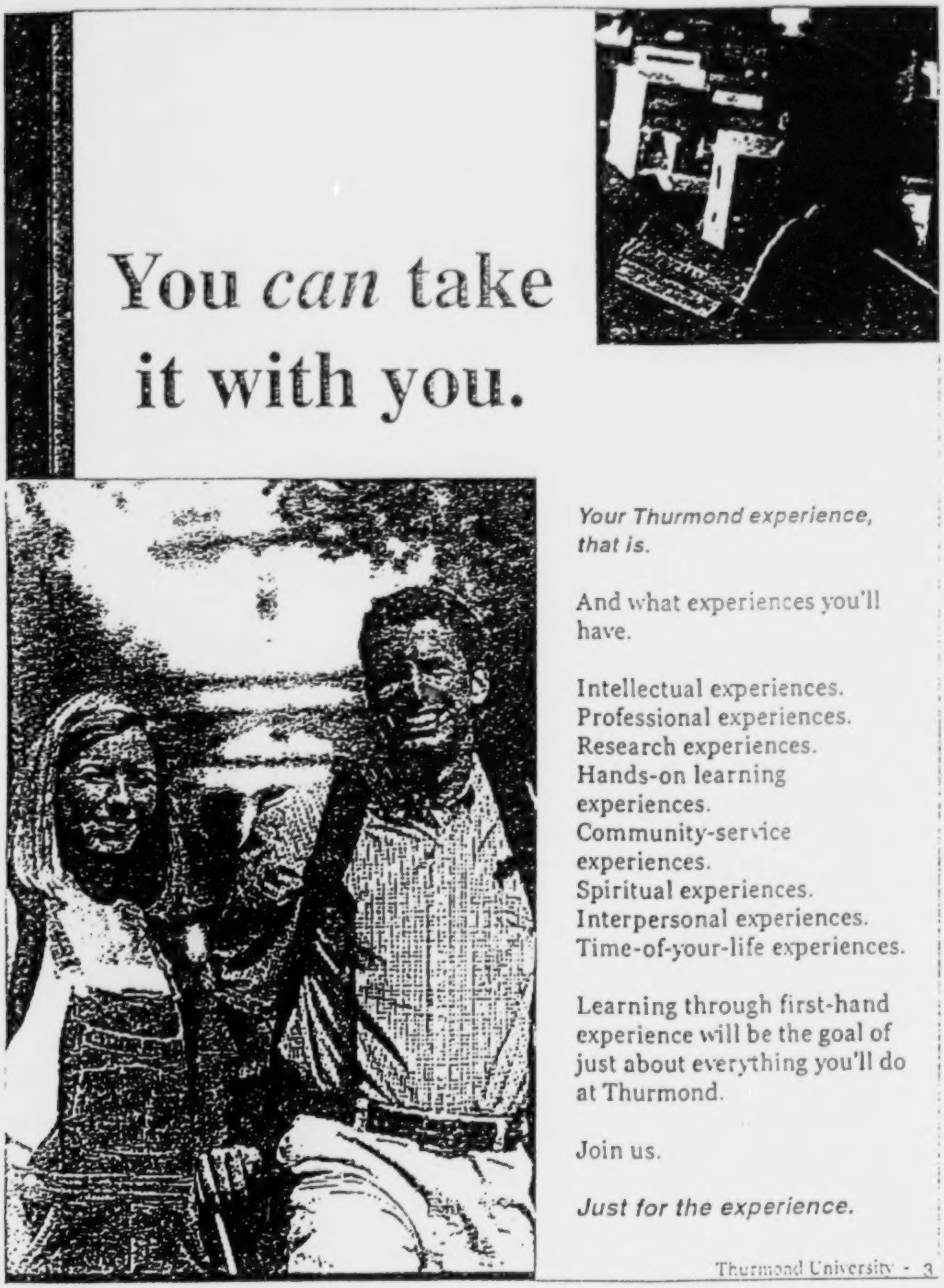

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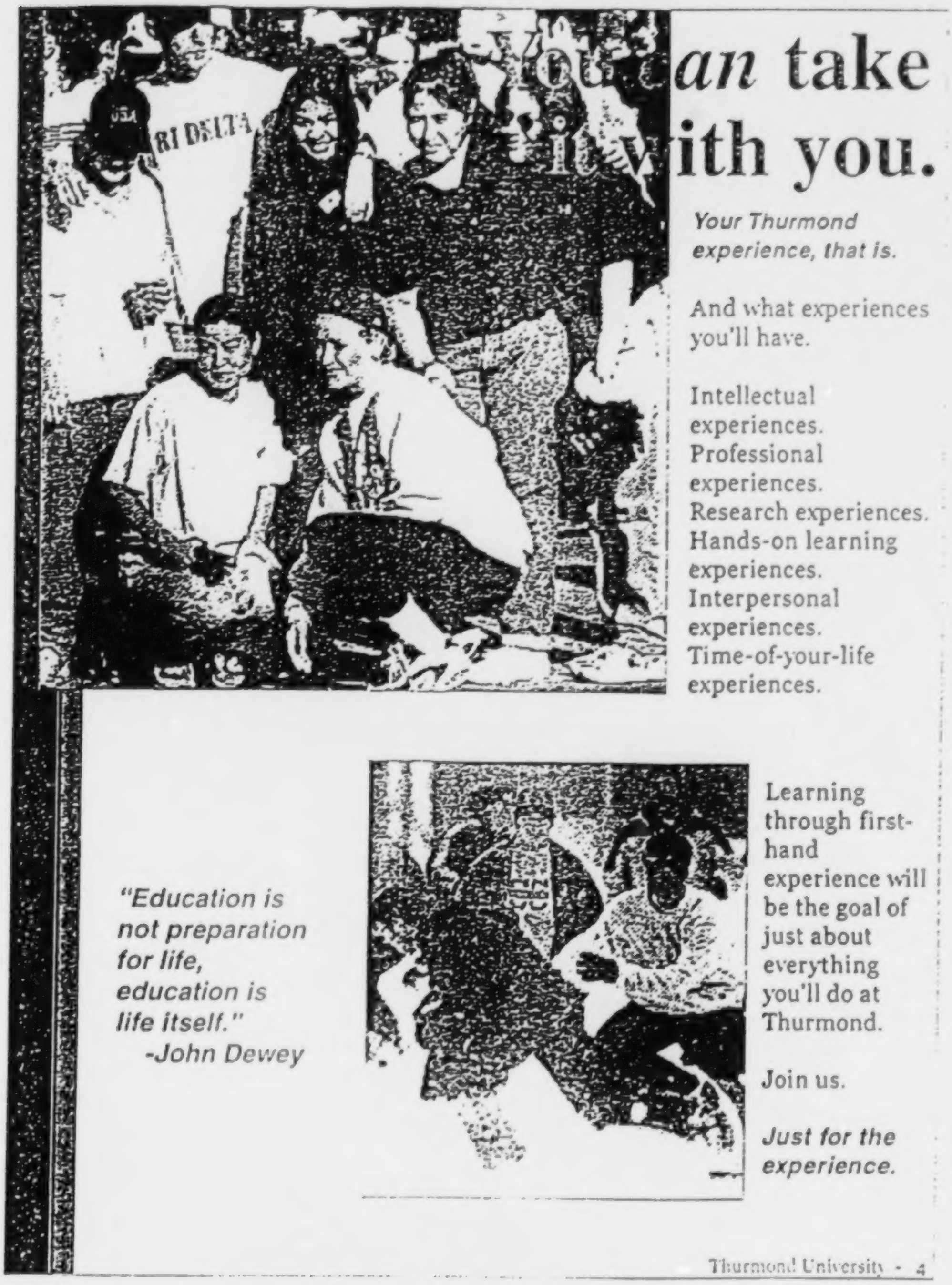

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"Education is not preparation for life, education is life itself."
-John Dewey

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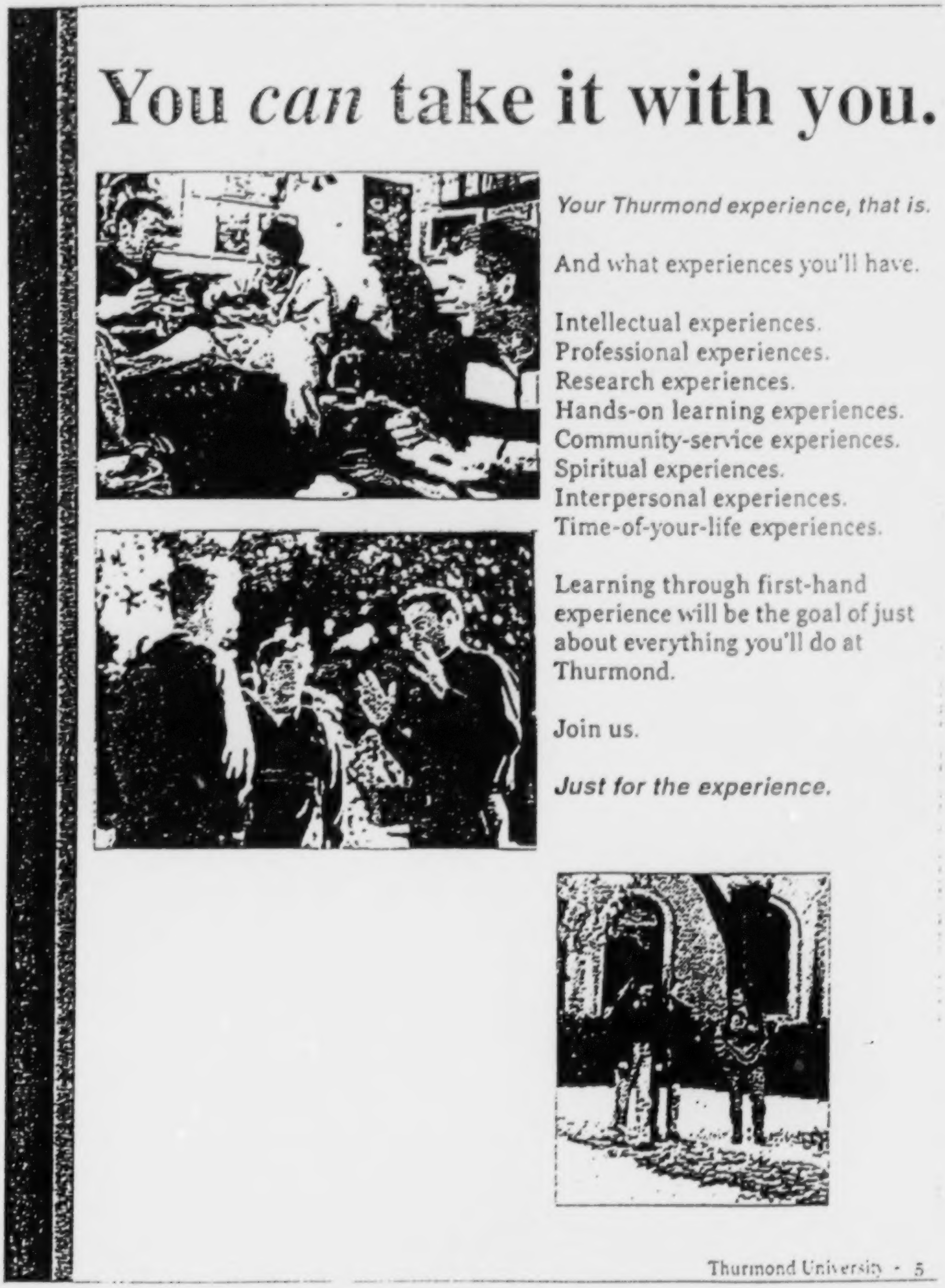

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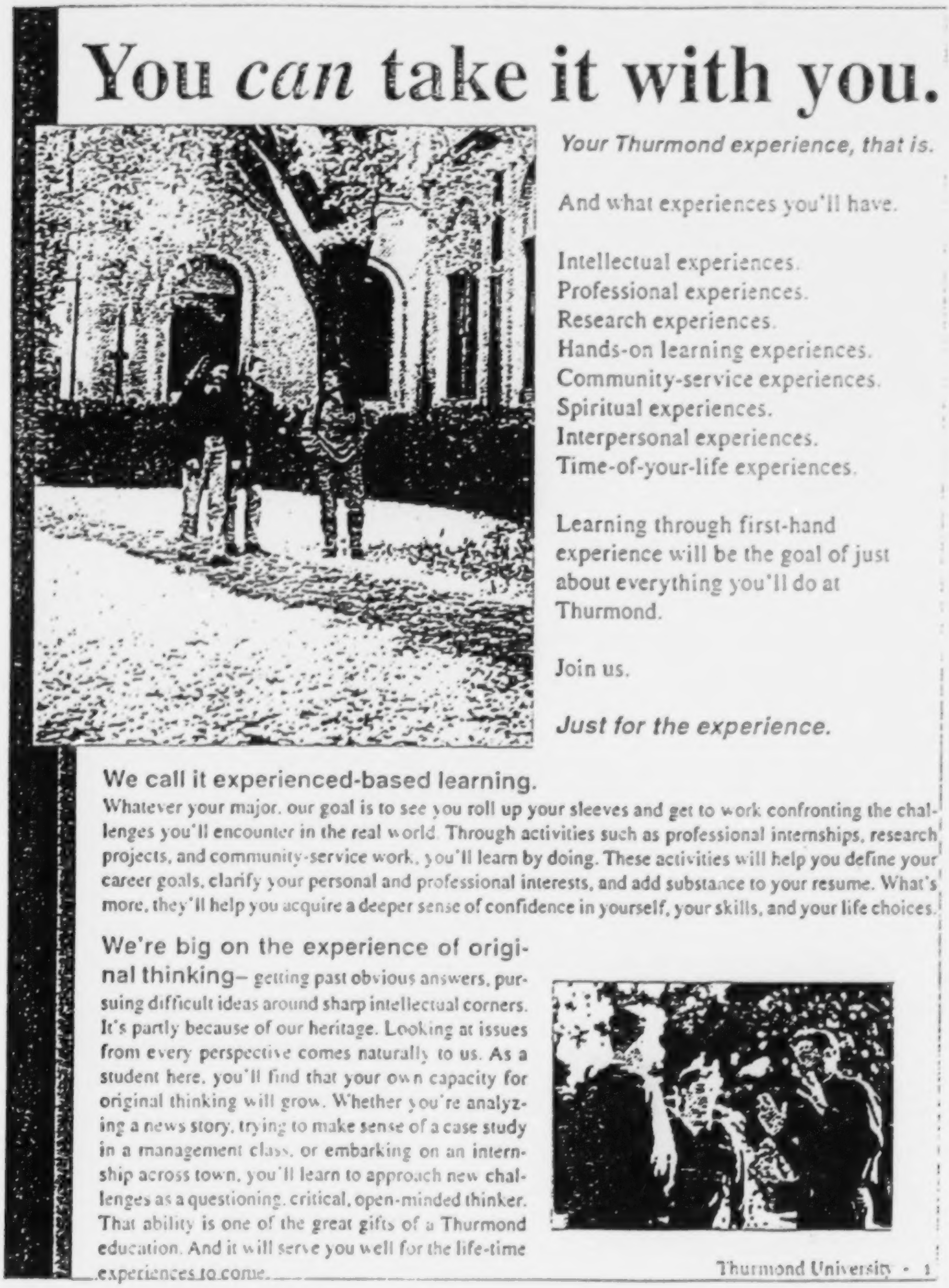
APPENDIX B

MOCK VIEWBOOK PAGES USED IN EXPERIMENT

VERSION B



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We call it experienced-based learning. Whatever your major, our goal is to see you roll up your sleeves and get to work confronting the challenges you'll encounter in the real world. Through activities such as professional internships, research projects, and community-service work, you'll learn by doing. These activities will help you define your career goals, clarify your personal and professional interests, and add substance to your resume. What's more, they'll help you acquire a deeper sense of confidence in yourself, your skills, and your life choices.

We're big on the experience of original thinking– getting past obvious answers, pursuing difficult ideas around sharp intellectual corners. It's partly because of our heritage. Looking at issues from every perspective comes naturally to us. As a student here, you'll find that your own capacity for original thinking will grow. Whether you're analyzing a news story, trying to make sense of a case study in a management class, or embarking on an internship across town, you'll learn to approach new challenges as a questioning, critical, open-minded thinker. That ability is one of the great gifts of a Thurmond education. And it will serve you well for the life-time experiences to come.

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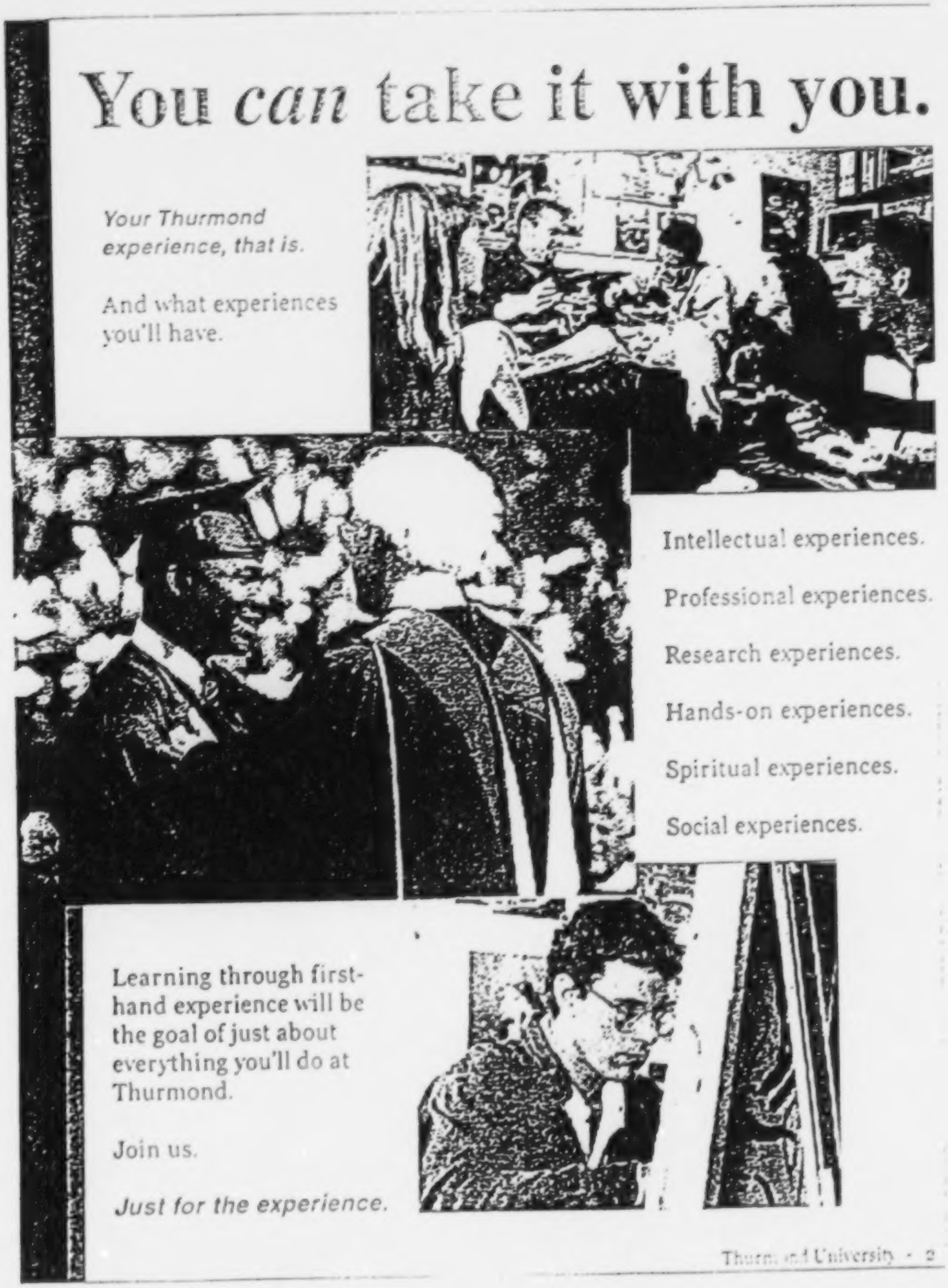

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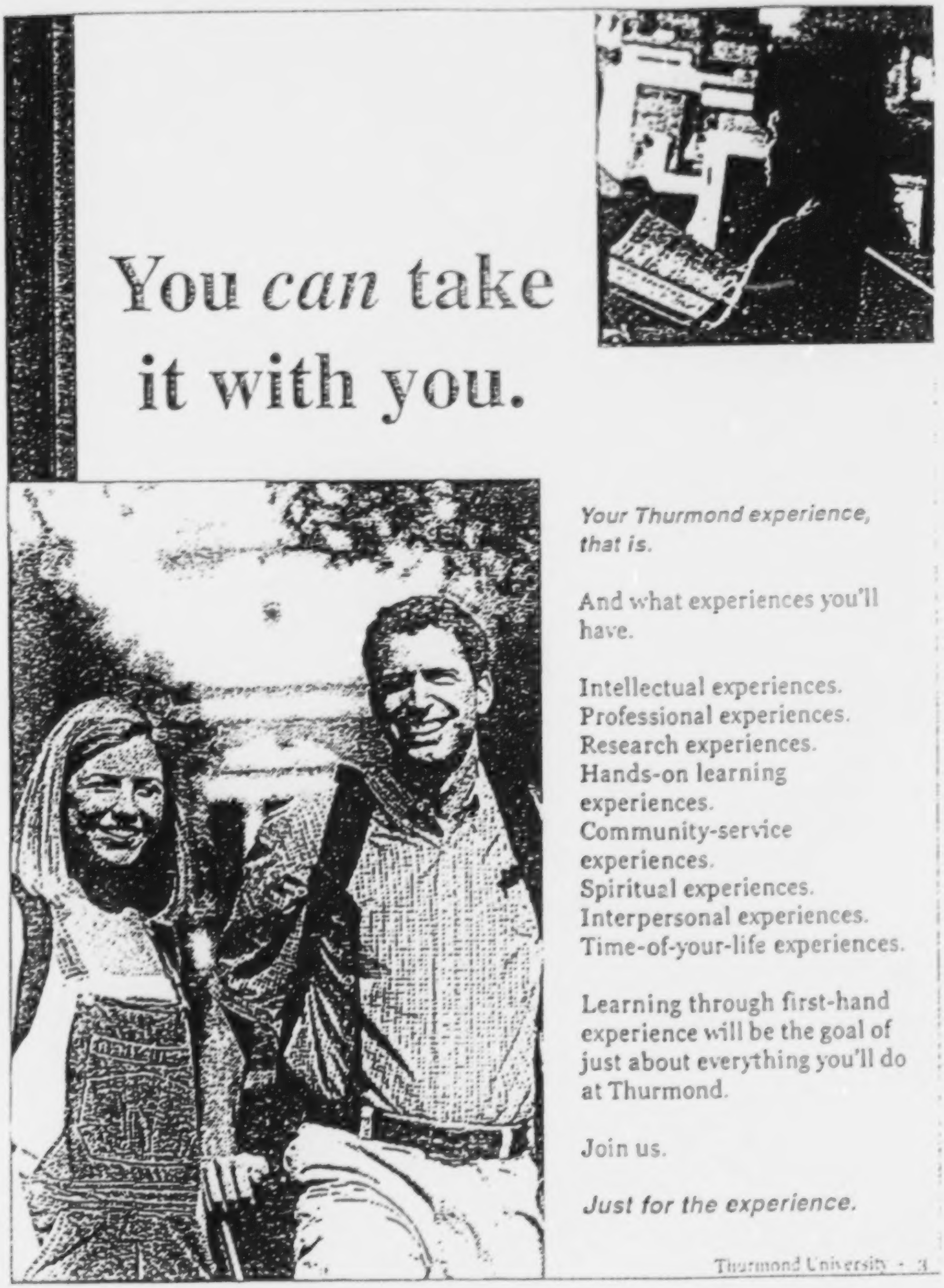

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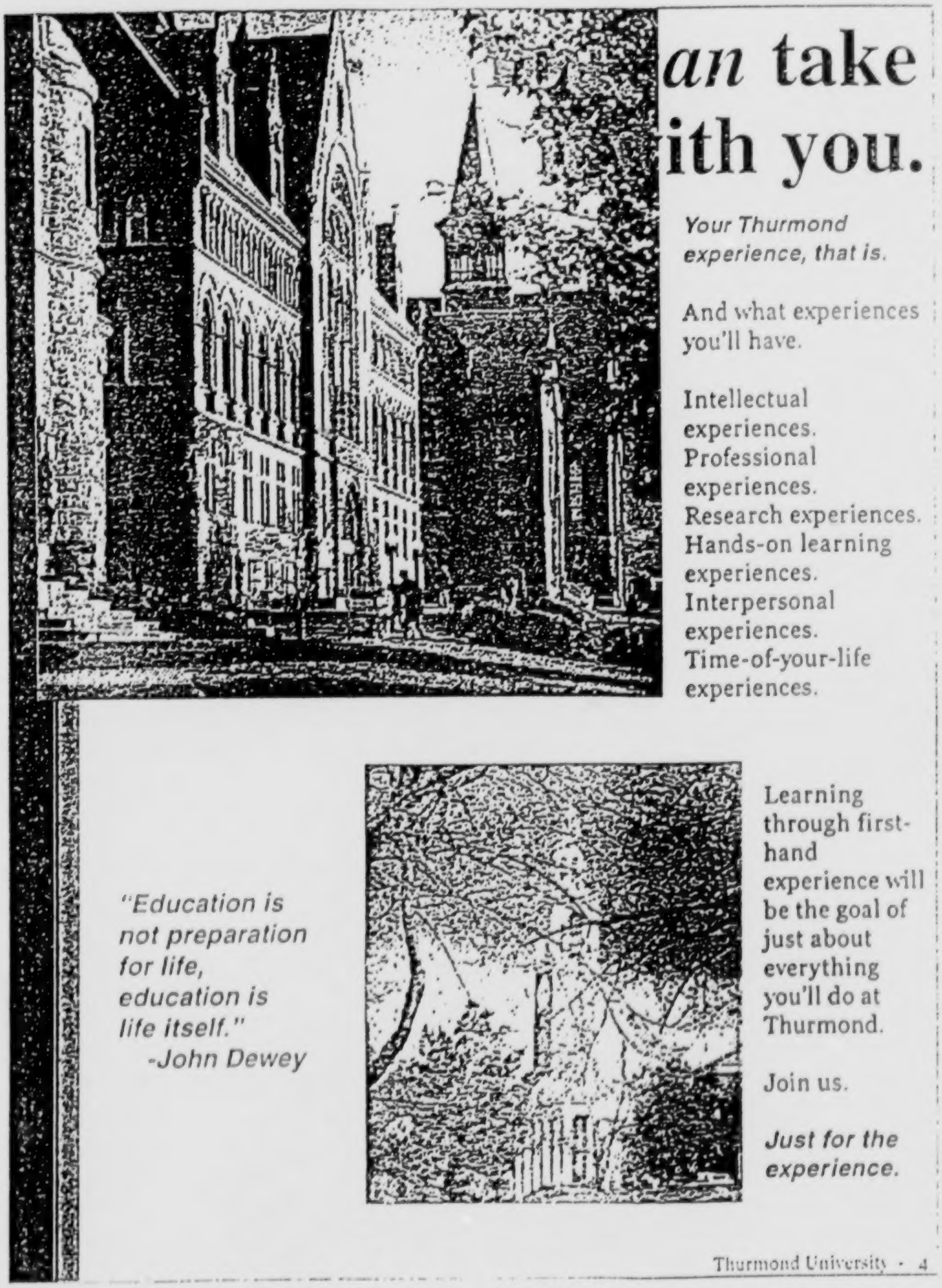

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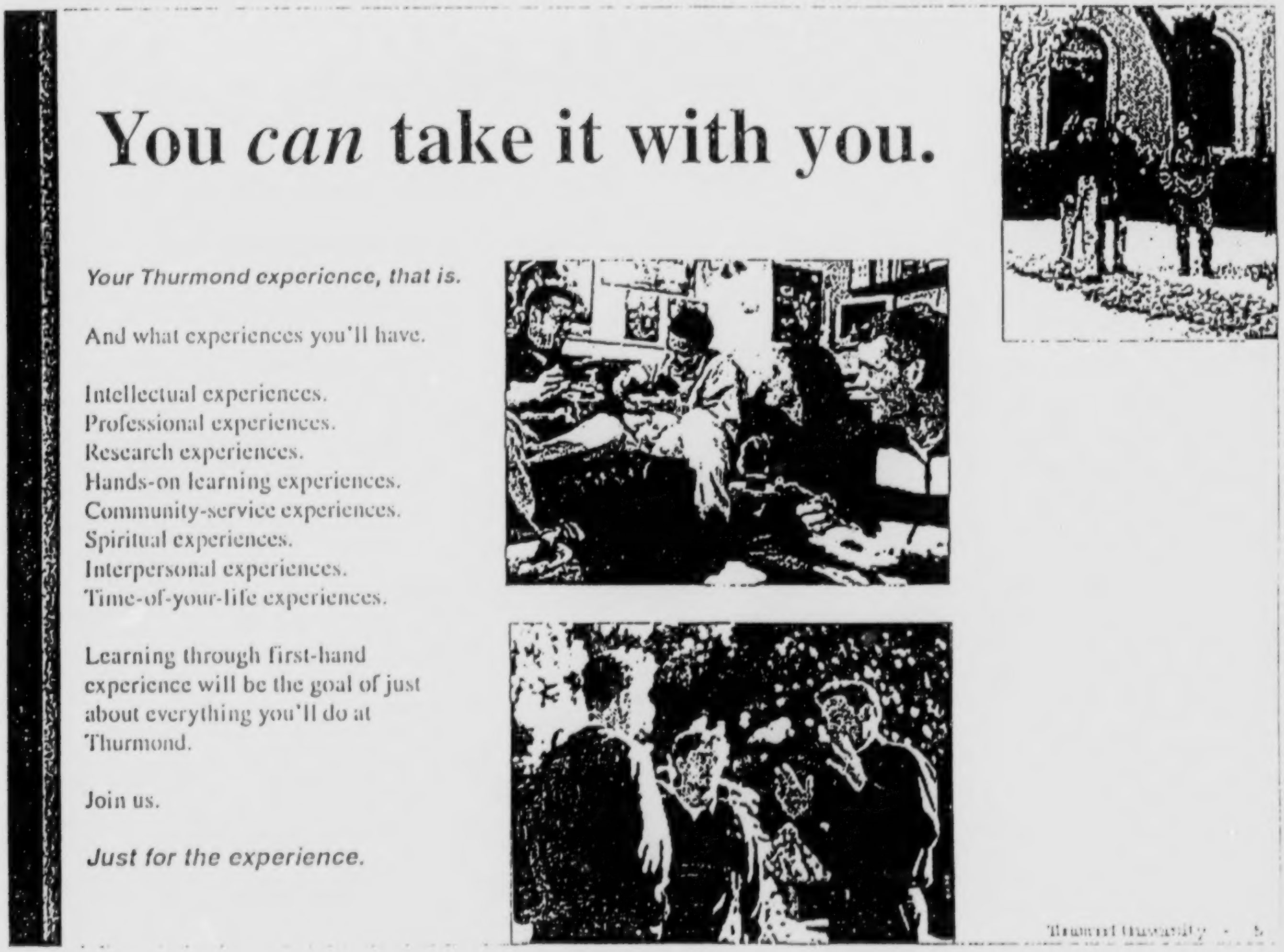

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Research experiences.
Hands-on learning experiences.
Community-service experiences.
Spiritual experiences.
Interpersonal experiences.
Time-of-your-life experiences.

Learning through first-hand experience will be the goal of just about everything you'll do at Thurmond.

Join us.

Just for the experience.

Thurmond University • 5

APPENDIX C

QUESTIONNAIRE

Directions: Please open your viewbook packets to page 1. Look at the viewbook page and complete the questions below.

Circle the number you want to select.

PAGE 1

This is a good looking page.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems very academic.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems like fun.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page makes me want more information from this school.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page is unattractive.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would like to visit this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would be interested in this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

STOP

Turn your viewbook packet to page 2.

Look at the viewbook page and circle your response.

PAGE 2

This is a good looking page.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems very academic.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems like fun.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page makes me want more information from this school.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page is unattractive.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would like to visit this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would be interested in this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

STOP

Turn your viewbook packet to page 3.

Look at the viewbook page and circle your response.

PAGE 3

This is a good looking page.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems very academic.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems like fun.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page makes me want more information from this school.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page is unattractive.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would like to visit this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would be interested in this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

STOP

Turn your viewbook packet to page 4.

Look at the viewbook page and circle your response.

PAGE 4

This is a good looking page.

1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems very academic.

1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems like fun.

1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page makes me want more information from this school.

1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page is unattractive.

1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would like to visit this college.

1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would be interested in this college.

1 2 3 4 5 6 7
strongly disagree neutral strongly agree

STOP

Turn your viewbook packet to page 5.

Look at the viewbook page and circle your response.

PAGE 5

This is a good looking page.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems very academic.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This school seems like fun.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page makes me want more information from this school.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

This page is unattractive.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would like to visit this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

I would be interested in this college.
1 2 3 4 5 6 7
strongly disagree neutral strongly agree

STOP
PLEASE COMPLETE THE QUESTIONS ON THE NEXT PAGE.

Write in age and circle the appropriate answer.

Age: ________

Gender: Male Female

Race: Non-Hispanic White Asian

African-American Other

Hispanic

Do you plan to go to college? Yes No

Do you plan to go to college right after high school graduation? Yes No

Have you already applied to a college or colleges? Yes No

Have you received any viewbooks from colleges/universities? Yes No

INVESTIGATING CORPORATE SOCIAL RESPONSIBILITY: A CONTENT ANALYSIS OF TOP CHINESE CORPORATE WEB PAGES

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INVESTIGATING CORPORATE SOCIAL RESPONSIBILITY: A CONTENT ANALYSIS OF TOP CHINESE CORPORATE WEB PAGES

INTRODUCTION

The Internet has become a mass communication medium used by corporations for marketing, advertising, and public relations purposes. It has created a new type of public that seeks information more actively than those reached through traditional mass media such as television. The Internet is different from traditional mass media in that it is able to engage people in round-the-clock, direct, simultaneous, and interactive communication. It also provides corporations with more control over the information content and its dissemination. The Internet has changed the way corporations communicate and presents great opportunities, as well as new challenges, to public relations professionals. In short, the Internet rewrites the rules of public relations (Lawrence, 1996).

As a new mass medium, the Internet serves as an effective tool for corporations to establish good will and build relationships. Corporations build good public images by reporting their corporate social responsibility on their Web sites. Fulfilling social responsibility has been regarded as the second bottom line of business since the 1980s and early 1990s (Cutlip et al., 1994). Yet publics, including investors, employees, communities, and other stakeholders, are interested in corporate socially responsible behaviors such as contributions and volunteer endeavors (Carroll, 1998). Business and investment literature shows that corporate social responsibility is also becoming increasingly important to investors (Badaracco, 1996). In addition, corporate social responsibility plays strongly into improving both corporate culture and image (Gill, 1999). However, studies have found that the public relations potential of the World Wide Web remains underutilized by many organizations and underexamined by scholars (Kent and Taylor, 1998; Marken 1998; White & Raman, 1999).

The Internet has also facilitated the globalization of the business world, as the World Wide Web brings closer businesses all over the world. Corporate Web pages serve as broad yet convenient windows not only to domestic publics but also to customers and investors abroad. This new trend urges corporations to know about, as well as expose, their organizations to the businesses outside their own country. Therefore, a study of non-U.S. business Web pages might be a good start toward harvesting benefits from the globalization trend. The present study is intended to investigate the current status of Web usage by large Chinese firms, especially the way these firms use their Web pages to support their corporate social responsibility performance.

China has an area of 9.6 million square kilometers, a population of 1.25 billion, and a history of five thousand years. As an emerging giant market, China offers great opportunities to businesses in and abroad. Since reforms were initiated in 1978, China's economy has enjoyed a high average growth rate of nine percent, and growth in foreign investment has been dynamic. In accordance with Chinese government's efforts in WTO accession, Chinese businesses have sped up their steps toward the globalization trend. They have realized that in order to compete with advanced foreign enterprises, they need to enhance their public image through improving their product and service quality and other social responsibility performances. The Chinese government is encouraging widespread Internet use to boost economic growth. In response to this, Chinese enterprises are also seeking to set up or upgrade their Web sites in order to enhance and foster trade. They have already realized the importance and effectiveness of the Internet as a new tool to propagate their products, services, and social responsibility performances.

The Internet has existed in China since 1987. In recent years, Internet use has been surging at an amazing speed. Xinhua News Agency (2000) reported that the number of Internet users in China has skyrocketed to nearly nine million, which is a huge jump compared to the fact that there were only 620,000 Internet users in October 1997. Given its large population and fast-growing economy, China has the potential to become the biggest Internet, as well as telecommunications, market in the world. The Credit Lyonnais Securities Asia predicted that mainland China's online community will reach 20 million by the end of 2000, 45 million by the end of 2001, and 100 million within five years.

It is important to note that Chinese social systems, economic background, customs, and values are very different from other nations, especially Western countries. Therefore, multinational corporations that have or will have markets in China should study Chinese culture as well as business. Through an analysis of the content of Chinese corporate Web pages, this study provides useful insights into how large Chinese corporations respond to the new technology, and how they use the Web to present themselves as socially responsible corporate citizens. It is a pilot study that contributes to a better understanding of globalization of the business world, international public relations, and multinational corporate social responsibility.

RELATED LITERATURE REVIEW

Corporate Social Responsibility

In the literature, corporate social responsibility (CSR) is referred to in many other different terms, such as corporate social performance, corporate social responsiveness, business ethics, and in the late 1990s, corporate citizenship. The concept of corporate social responsibility has a long and varied history, but formal writing on social responsibility is largely a product of the 20th century (Carroll, 1999).

According to Carroll (1999), the modern era of social responsibility began in the 1950s with Howard R. Bowen's book *Social Responsibilities of the Businessman*, which was published in 1953. Carroll considers Howard Bowen the "Father of Corporate Social Responsibility." The initial definition of social responsibility set forth by Bowen was "the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (as cited in Carroll, 1999, p. 268). Definitions of CSR began to proliferate in the 1970s. Notable definitional contributors include

Davis, Steiner, Wells and Walton, Sethi, Preston and Post, Carroll, and Frederick. Among the scholars who have contributed to the definitions and theories of CSR, Frederick and Carroll hold particularly important positions.

Frederick's four CSR models reflect the development of the definitions and theories of CSR. Frederick (1978/1994) labeled CSR1 as "corporate social responsibility," manifesting that business corporations have an obligation to work for social betterment. CSR1 is concerned with social obligations. The second model, CSR2, which Frederick labeled "corporate social responsiveness," refers to the capacity of a corporation to respond to pressures from the society, focusing on patterns of response to social pressures. Frederick (1986) developed his third model of corporate social responsibility, CSR3, which is labeled "corporate social rectitude," emphasizing moral correctness and adherence to central values. Frederick's CSR4 suggests that the study of corporate social responsibility should take social and natural science perspectives into account.

Carroll (1979) also developed a definition of corporate social responsibility. He held that "the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time" (p. 500). The economic component suggests that society expects business to produce goods and services and make a profit by selling them, while the legal component means that society also expects business to obey the law. Ethical responsibility refers to behaviors and ethical norms that society expects business to follow, which are beyond what is required by the law. Discretionary responsibility represents voluntary social roles that are not mandated by law and not expected by the society in an ethical sense, such as philanthropic contributions, training programs, and provision of day-care centers. In other words, a CSR firm should "strive to make a profit, obey the law, be ethical, and be a good corporate citizen" (p. 43).

Carroll (1991) further explained that the four categories of CSR might be depicted as a "pyramid," with the economic category as the foundation on which all others rest. He reasoned that economic responsibility predicts the other three responsibilities because without it the others become "moot considerations" (p. 40). However, he emphasized that each responsibility is to be fulfilled at all times, not in a sequential fashion. Carroll (1998) also indicated that although the four faces of corporate citizenship are frequently in tension with one another, they are intimately related.

Beyond the concept of corporate social responsibility, researchers also examined the specific behaviors when they investigate corporations on their social responsibility performances. The literature on the components of corporate social responsibility further illustrates researchers' understanding of corporate social responsibility.

Sethi (1975) developed a three-state schema for classifying corporate behavior, which he labeled "corporate social performance." He argued that there are three states of corporate behavior: **social obligation**, which refers to proscriptive behaviors in response to market forces or legal constraints; **social responsibility**, which addresses prescriptive behaviors meeting social norms, values and expectations of performance; and **social responsiveness**, which refers to the anticipatory and preventive adaptation of corporate behavior to social needs. In Sethi's schema, he described eight dimensions of corporate behavior and the specific techniques of these dimensions in each state of social responsibility (see Table 1). He also pointed out that components of corporate social responsibility might vary greatly in different times, different nations, and different cultures because the evaluation of corporate social performance must be to a great extent culturally and temporally determined.

Based on a study of the Committee for Economic Development, Edward Bernays (1975) listed 10 fields of corporate social responsibility activities: economic growth and efficiency, education, employment and training, civil rights and equal opportunity, urban renewal and development, pollution abatement, conservation and recreation, culture and the arts, medical care and government. He indicated that social responsibility is one prime area of activity of the public relations adviser.

Wood (1991) developed a Corporate Social Performance Model (see Table 1) based on the Carroll (1979) model and a model developed by Wartick and Cochran (1985). In this model, corporate social responsibility is addressed at three levels: institutional, organizational and individual. At the institutional level, the principle of corporate social responsibility is the principle of legitimacy, which suggests that businesses that do not use in a responsible manner the power granted by society would tend to lose it in the long run. This view echoes Davis's statement that "the avoidance of social responsibility leads to gradual erosion of social power" (Davis, 1960, p. 73). The organizational principle is public responsibility, which emphasizes each firm's relationship to its own specific environment. At the individual level, the principle is managerial discretion, focusing on the options and opportunities available to individual actors within their organizational contexts.

Esrock and Leichty (1998) hold that the central elements of social responsibility include adhering to fair and honest business practices, maintaining product safety and reliability, taking care of employees, and improving the environmental record. They analyzed the Web sites of a random sample of *Fortune* 500 companies. Their findings indicated that the main social responsibility issues addressed included community/civic involvement, ecology/environment, education, charity/foundations, children, health, volunteerism, diversity, arts, fair business practices/policies, worker safety, product safety, and quality of work life. More than half of the Web sites of these companies had items addressing community involvement, environmental concerns, and education.

Based on the CEP's (Council on Economic Priorities) rating criteria on corporation social performance, Gill (1999) developed an eight-category measurement on corporate reporting of social responsibility issues in their annual reports and Web sites. The eight categories were the environment, women's advancement, minority advancement, charitable giving, community outreach, family benefits, workplace issues, and social disclosure.

Using Carroll's (1979) classifications as a guideline, Maignan and Ferrell (2000) developed a framework to investigate specific CSR behaviors concerning three types of stakeholders, i.e., customers, employees, and community. Maignan and Ferrell constructed a number of indicators to measure the four faces of corporate citizenship (see Table 1). They pointed out that the indicators they employed might not be representative and might not be sufficient to provide an overall understanding of corporate citizenship, but their analysis provided a more specific picture of what corporations were doing or should be doing to fulfill their social responsibilities.

Corporate Social Responsibility and Public Relations

Public relations professionals have realized public relations and corporate social responsibility are not separate activities. Instead, they are intimately connected to each other. As corporate social responsibility affects a company's image and reputation and offers the opportunity to build good will, it is often managed by public relations practitioners for public relations ends and is seen as part of the public relations "portfolio." Consequently, public relations practitioners may be directly involved in the decision-making process and therefore partially responsible for corporate social responsibility activities (L'Etang, 1994). L'Etang also suggested that the public relations practitioners' role is to sponsor corporate social responsibility and contribute to policy, not just to publicize corporate social responsibility. Heath and Ryan (1989) believed that qualified public relations practitioners have an important role in developing ethical standards of corporate performance and can help top corporate executives by teaching them ethical standards.

Judd (1989) had suggested that improving social responsibility might be a way to enhance the credibility of both practitioners and their organizations, and the status of public relations may improve if public relations practitioners play the role of the social conscience of their organization. He found that there was a significant positive relationship between public relations practitioners' recommending socially responsible actions and public relations practitioners' participating in policy decisions.

Public relations and corporate social responsibility are intimately connected to each other. Public relations practitioners should not only commit to supporting their organizations to perform their social responsibilities, but also should use corporate social responsibility as a tool for public relations purposes.

Research on Corporate Web Pages

The World Wide Web has become an important tool for organizations to communicate their social responsibility, and corporations make use of the Web to present themselves as socially responsible citizens. The Internet has tremendous potential impact on individuals as well as organizations and has been subject to widespread research. Communications researchers have studied corporate Web pages to investigate corporate objectives for setting up Web pages. These researchers have primarily studied content features, commercial content, interactive communication strategies, issues management, agenda-setting strategies, and social responsibility reporting.

Liu et al. (1997) studied the content of Web pages of top American corporations to investigate the current status of 1994 *Fortune* 500 company home pages and to identify the ways in which these companies have responded to Web technologies. The results of their study showed that 64.4 percent of *Fortune* 500 companies had Web pages. The researchers found that firms that had higher market performances, measured by revenue, were more likely to use Web sites to reach their customers. They also found that industries in transportation, communications, electric, gas, and sanitary services, retail trade, manufacturing, finance, insurance, and real estate, and services had a larger number and higher percentage of companies that have Web pages, while industries in construction and mining had a very small percentage of Web pages.

Vattyam and Lubbers (1999) analyzed the home page features of a random sample of 1997 *Fortune* 500 companies and provided a profile of commercial use of the World Wide Web by these firms. Their results showed that 83 percent of the companies maintained Web sites under their corporate name. The main content or features of home pages were press releases, financial information, overview of the company, listings of products, and employment notices, which were present in almost 90 percent of the home pages. Their results also showed that most firms used the Web to provide information to gain goodwill and to provide stockholders with relevant information. In addition, the purpose of provision, which refers to the supply of information to gain good will and exposure, contained features that were traditionally associated with public relations activities.

Esrock and Leichty (1998) analyzed a random sample of the Web pages of 1997 *Fortune* 500 companies to examine how large corporations are making use of the World Wide Web to present themselves as socially responsible corporate citizens and to promote their own policy positions. The authors identified 14 categories of content areas of social responsibility (see Table 1). The researchers found that 90 percent of the companies had a corporate Web site and 82 percent of the sites addressed at least one corporate social responsibility issue. The results suggested that the Internet had been accepted as an image-building public relations practice. They also found that the number of social responsibility items on Web sites was positively correlated with the size of an organization, but was unrelated to a company's ranking within its industry. The researchers concluded that Web pages were primarily utilized to disseminate corporate social responsibility information in much the same way as other traditional, one-way corporate communication vehicles and that the prominent model of corporate Web pages was top-down communication.

Gill (1999) observed that many corporations are realizing now that public relations can help foster a strong, positive corporate culture, which helps build a good corporate image. Corporate social responsibility in turn improves both corporate culture and image. The author argued that social responsibility is an aspect of public relations. Corporations can use social responsibility to meet their goals and objectives, while helping society or communities meet their goals and objectives. Gill employed content analysis to examine the extent to which the corporate annual reports and Web sites of six corporations demonstrated social responsibility. The study was to determine whether the information on social responsibility was obvious or readily available in corporate annual reports and Web sites. The results showed that there was not enough evidence in the annual reports and Web sites of the six corporations to support a strong commitment to social responsibility as defined in the study.

Research Questions and Hypotheses

The literature review indicated that the World Wide Web has been accepted by corporations as a public relations tool to support corporate social responsibility activities. Yet, there is a lack of research on corporate Web usage for CSR ends. Thus social responsibility reporting is the focus of this study. As China is becoming an important player in the world market, Chinese businesses have committed efforts to promote their product and public images on the Internet. The literature suggests that U.S. large firms play a leading role in the use of information technology. We wonder if large Chinese firms also serve as leaders in the use of information technology and fully use the interactive features of the Internet to report their social responsibility activities. As a result, the following questions make up this work:

1. How many Top 100 mainland China companies have a Web site?
2. What type of industries do these companies represent?
3. What corporate social responsibility areas are addressed by Chinese top firms?

These descriptive questions address the general situation of the Chinese business Web sites. The literature also leads to the question, "Are a company's market value, industry type, and Web page reports of corporate social responsibility activities related?"

Three hypotheses are generated from the above questions (as there are expected differences between the market values of different Industry types, the hypothesis tests will control for industry type):

H1: The larger the company within its industry, the more likely it has a Web site.

Rationale: Previous work (Liu et al., 1997) found that for American companies there was a dependent relationship between the presence of a home page and revenue. The higher-revenue companies are more likely to have a Web site. In this study, the size of the companies is measured by stock market value.

H2: The larger the company within its industry, the more corporate social responsibility areas it addresses on its Web pages.

Rationale: Dalton and Kesner (1985) suggested that large organizations have enormous impact on the economy and the community and therefore are subject to closer scrutiny and call for greater social responsibility on the part of publics. Esrock and Leichty (1998) also suggested that larger entities are particularly concerned about their corporate reputation and they found that for American companies higher revenue organizations tend to include more social responsibility information and issues on their Web sites. Other studies (Eilbert & Parket, 1973; Trotman & Bradley, 1981) found there was a significant association between the amount of social responsibility information disclosed and the size of a company in terms of total assets and sales volume.

H3: There are significant differences between business types and the number of corporate social responsibility areas addressed on company Web pages.

Rationale: Fry et al. (1982) suggested that the companies with more contact with the general public tended to make more philanthropic gifts than firms with less public contact. According to Esrock and Leichty (1998), technology and environmentally oriented firms emphasized a greater number of no-harm issues, such as environment, worker safety and product safety, on their Web pages than either the financial or wholesale-retail firms.

METHODOLOGY

The method of content analysis was used to analyze the CSR areas addressed on Web pages of the top Chinese firms. The author and another trained coder conducted the coding, using the definitions discussed below. Because not all the Web pages have an English version, which is usually much simpler than the Chinese language version, only the Chinese language version was coded.

Population and Sample

The Web pages of the top 100 mainland Chinese firms were content analyzed. These companies are all state-owned enterprises and all sell stock in China. *Yazhou Zhoukan*, a Hong Kong magazine with a worldwide distribution of 98,447 copies, provided the top 100 list and summary information about the companies' locations, main business, market values, profits, and total assets. As the world's only international Chinese news weekly, *Yazhou Zhoukan* provides weekly coverage and analysis of the world's major events in politics, business and culture from a Chinese perspective, reflecting Chinese values, traditions and priorities. Every year since 1994, *Yazhou Zhoukan* has ranked the "Top 100 Listed Enterprises in mainland China" by their market value. The list is kind of a Chinese version of *Fortune* 500. The top 100 companies were ranked by market value of their class A common stock, which is issued only to Chinese citizens, as of June 30, 1999.

Previous studies (Li, McLeod & Rogers, 1993; McLeod & Rogers, 1982) show that American top companies (*Fortune* 500) usually provide leadership in the use of information technology. As there is lack of research on Chinese companies, it is assumed in this study that top Chinese companies also serve as leaders among Chinese businesses in the use of information technology. It has to be noted that *Fortune* 500 companies are ranked by their revenue, not market value.

Locating Web sites

Two sources were used to locate and examine Web pages: Sohu (http://www.sohu.com.cn) and Yahoo! China (http://cn.Yahoo.com). These two sites are considered to have the best search engines and the richest data on various Chinese topics (Einhorn et al., 1999; Madden, 1999). Yahoo! China contains links to more than 40,000 Chinese-language Web sites (Hanley, 1999). A searchable database of each firm's name list and Web site and email address is available on Sohu's China Listed Companies at http://www.listcom.com.cn. The search engine can search a company by its stock number or the company's name. This site also provides a direct link to those companies that have a Web site. For those companies that were not linked to the Sohu site, a search was conducted using the search engine on Yahoo! China. The initial data were collected and validated between June 10, 2000, and August 10, 2000, by searching both Sohu and Yahoo! China on a company name search.

Pilot Study

A pilot study was conducted on May 7, 2000. Five randomly selected Web sites were coded. Most of the content in these sites was used for marketing and investor relationships. None of the five sites addressed worker safety. However, some of them did address product and service quality, which is a great concern in China. One site addressed "children" as well as "the elderly." This reflects an important social value in China: Respect the elderly and take care of the young. Mengzi, a famous ancient Chinese philosopher, advocated respecting the elderly and loving the young not only in your own family but also in the families of others. This value was, and is still now, the model followed by the Chinese people. As a result, a new item "elderly" was added to the corporate social responsibility area categories of previous authors.

Industry Types

China might categorize industry type in a different way from the United States. However, an American category framework was used because it is easier for American readers to understand and permits comparison with prior studies of U.S. businesses. The categories of industry types and definitions (see Appendix 1) were adopted from the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor (http://www.osha.gov/cgi-bin/sic/sicser5). During the tests of the hypotheses, the industry types were collapsed into two groups, manufacturing and non-manufacturing, due to the overwhelming number of cases (63%) in the category of manufacturing.

Market Value

As noted, the top 100 companies in mainland China were ranked by the market value of their class A common stock as of June 30, 1999. The market value was reported in U.S. dollars.

The information was from *Yazhou Zhoukan*, which listed the market value both in Chinese RMB and U.S. dollars. The publication explained that the U.S. value was calculated according to the exchange rate on June 30, 1999. As mentioned, *Yazhou Zhoukan* is a Chinese version of *Fortune* 500. The China National Information Center and China Economic Information Network (Hong Kong) Co. Ltd. helped *Yazhou Zhoukan* collect and compute the data. During the tests of the hypotheses, the top 100 firms were divided into three categories based on their market value as of June 30, 1999: above $345 million, between $270 and $345 million, and below $270 million. As the market values of most of these companies were very close, the sample was simply divided into three groups by nearly equal numbers of companies (33, 34, 33).

Initial Data Coding

The coding was conducted between June 10, 2000, and August 10, 2000. Once the Web site was located, the features in the coding scheme were searched for on the homepage and on all the pages within the initial URL that could be reached through links off the homepage. However, if a corporation had a link to a subsidiary and the first portion of the URL for that entity was different from the parent firm, the subsidiary's page was not included in the analysis. Data on the top 100 mainland Chinese companies were coded into several categories. Only the Chinese language version was coded because the English version usually contained much less information and not all the Web pages had an English version. The researcher and the other trained coder are native speakers of Chinese and also have reliable English-Chinese and Chinese-English dictionaries. Because the corporate Web usage changes rapidly and it was hard for the two coders to code the same Web page at exactly the same time, the author first recorded the content features on a form (see Appendix 3); then both coders coded them into the respective categories.

Reliability

Coding within each CSR category was tested individually for reliability, using SPSS Interclass Correlation Coefficients tests. The inter-rater correlations ranged from .78 to 1.0. The average of all the correlations was highly reliable (.95 with 95% confidence), suggesting that the coding scheme is reliable and the definitions are very clear.

Corporate Social Responsibility Areas

The 14 corporate social responsibility areas identified by Esrock and Leichty (1998) were used as a guideline. Their categories are relatively recent, comprehensive, and appropriately specific for coding in this study. The author contacted both Esrock and Leichty, asking for their definitions of the categories. Unfortunately, they don't have written definitions. Therefore, the author adapted their category labels and through testing developed her own definitions for each category. The definitions of the CSR areas that were used to measure the Web pages in this study are listed in Table 2.

As noted above, one additional unit "elderly" was added to the categories based on the result of the pilot study. When the researcher was recording the content features, she found many corporations supported national or regional sports, which is a very common phenomenon in China. Therefore, a category of Sports was added. Although China is a multi-ethnic country, these different ethnic groups have harmoniously lived together in China for thousands of years. There is not such an issue of "diversity" as in the United States, and the Chinese Web pages do not refer to diversity. As a result, the category of Diversity identified in Esrock & Leichty's (1998) study was omitted.

(Table 2 is about here)

The original list also included a Charity/Foundations category. During the coding, the researcher and her backup coder both felt that the category of Charity/Foundations had much overlap with many other categories, which included Community/Civic Involvement, Education, Children, Health, Elderly, Arts, and Sports. We decided to omit Charity/Foundations as a category and coded the items into other categories based on the ultimate goal or beneficiary of the activity or policy.

Analysis Methods

Data were analyzed using the Statistical Package for the Social Sciences (SPSS).

Descriptive statistics were used to calculate percentages of Web pages having each of the content features. The hypotheses were tested as follows. In all analyses, alpha = .05.

Hypothesis 1:

Hypothesis 1 stated that the larger the company, the more likely it has a Web site, controlling for industry type. This hypothesis was tested by a chi-square test for independence, with industry type as a control factor.

$$f_{Sl} > f_{Sm} > f_{Ss}$$

Hypothesis 2:

Hypothesis 2 stated that the larger the company, the more corporate social responsibility areas it addresses on its Web pages, controlling for industry type. Because the Levene test of equality rejected the assumption that the two industry-type groups came from populations with the same variance, Hypothesis 2 was tested with a Pearson's correlation instead of an analysis of covariance. The two industry-type groups were tested separately.

$$\rho_{s,\,csr} > 0$$

Hypothesis 3:

Hypothesis 3 stated that there are significant differences between business types and the number of corporate social responsibility areas addressed on company Web pages. Because the number of business types had been reduced to two, Hypothesis 3 was tested with an Independent-Samples t-test.

$$\mu_{mfg} \neq \mu_{nonmfg}$$

RESULTS

A total of 53 Web sites were found through the two search methods. Two firms had links to their sites, but there was no content because the sites were under construction. Eleven firms had their URL address listed in the database on www.sohu.com, but the sites were unavailable. Thirty four other companies did not maintain Web sites under their corporate name. Table 3 reports the types of industries the *Yazhou Zhoukan* Top 100 Chinese companies represented and descriptions of the firms with and without Web pages both by industry type and by proportion of firms with Web pages.

Table 3. Types of Industries Represented by the Top 100 Chinese Companies (n=100)

Type of industry	Number of firms		Proportion of firms with Web pages (n=53)
	Total	With pages (within industry type)	
Manufacturing	63	38 (60.3%)	71.7%
Finance, insurance & real estate	9	5 (55.6%)	9.4%
Construction	4	2 (50%)	3.8%
Wholesale trade	2	1 (50%)	1.9%
Transportation, communications, electric, gas & sanitary services	17	6 (35.3%)	11.3
Agriculture, forestry, and fishing	4	1 (25%)	1.9%
Nonclassifiable establishments	1	0 (0%)	0%
Total	100	53	100%

As Table 3 indicates, these 100 firms fall into the OSHA divisions A through K; sixty three were manufacturing firms, seventeen belonged to division E (transportation, communications, electric, gas, and sanitary services), nine were finance and real estate, four were construction and agriculture each, two wholesale trade and one comprehensive (nonclassifiable). Manufacturing had the greatest proportion of an industry with Web pages (60%) as well as the greatest proportion of the companies with Web pages overall (72%).

Corporate Social Responsibility Areas

Using the CSR categories and definitions discussed in the above sections, the Web sites were examined for addressed CSR areas. The author found that among the 53 companies that had Web sites,

- 42 percent included environmental issues, such as promoting environmentally friendly and/or energy-saving products, protecting the environment and saving energy during the manufacturing process, setting up environmental protection facilities, and other environmental protection activities.
- 38 percent reported the company's efforts in supporting education, including

donating funds and/or materials to educational institutes, setting up scholarships or funds, maintaining schools and/or kindergartens, sponsoring educational activities, collaborating with academic institutes, and other supporting efforts.

- 38 percent of the sites revealed efforts intended to improve the quality of employees' work life. These efforts included providing training programs, setting up daycare centers, offering employee health exams, and organizing recreational activities such as sports games, parties, concerts, and tours.
- 26 percent had community/civic involvement activities that were intended to help improve the development of the country or the community where the company was located.
- 15 percent reported volunteer work to the community or the country.
- 13 percent expressed their concerns on fair business practices.
- Only a few sites reported their efforts in supporting arts (6 sites), worker safety (5 sites), sports (4 sites), children (4 sites), health (3 sites), product safety (3 sites), and the elderly (1 site).

(Figure 1 is about here)

The percentages of the CSR areas are presented in Figure 1 and the specific reports of the CSR activities are included in Appendix 2. The number of CSR areas addressed on each site ranged from 0 to 7. The average number of addressed CSR areas per site was 2.24. In manufacturing industries the average number was 2.65, and in non-manufacturing, 1.2.

Hypothesis 1:

Hypothesis 1 stated that the larger the company, the more likely it has a Web site, controlling for industry type. Hypothesis 1 was tested by a chi-square test for independence, with industry type as a control factor. Fifty eight percent of the 33 companies whose market value was above $345 million, 53 percent of the 34 companies whose market value was between $270 and

$345 million, 49 percent of the 33 companies whose market value was below $270 million had a Web site. Figure 2 shows the percentages of Web site based on market value.

(Figure 2 is about here)

Raw data indicated that higher market value companies were more likely to have a Web site, but the difference was not supported by the chi-square test for independence ($p > .05$). When industry type was controlled, the relationship between market value and Web presence was still not significant (see Table 4). However, manufacturing showed same pattern as the raw data and approached significance ($p = .06$), but was not significant at the .05 level. Further exploration of the data indicated that for manufacturing industries the largest companies had significantly more Web sites than the smallest companies.

Table 4. Web Presence by Size, Controlling for Industry Type (n=100)

	With Web Pages				x^2	df	*p*
	High	Medium	Low	Total			
Manufacturing	79%	62%	44%	60%	5.5	2	.06
Non-manufacturing	29%	39%	60%	41%	2.4	2	.30
Whole group	58%	53%	49%	53%	.55	2	.76

Hypothesis 2:

Hypothesis 2 stated that the larger the company, the more corporate social responsibility areas it addresses on its Web pages, controlling for industry type. Hypothesis 2 was tested with a Pearson's correlation instead of an analysis of covariance. The two industry-type groups were tested separately. When industry type was not controlled, the correlation was not significant ($r = .10$, $p = .25$). The average number of CSR areas per site was 2.3 (see Table 5). When industry type was controlled (manufacturing and non-manufacturing were tested separately), the results of the Pearson's correlation tests were somewhat different. The results showed that within manufacturing industry, there was no significant relationship between the market value of the company and the number of corporate social responsibility areas addressed on the company's Web site ($r = .03$, $p = .43$). However, within non-manufacturing industries, there was a significant relationship between market value and number of CSR areas ($r = .49$, $p = .03$; see Table 5). Therefore, hypothesis 2 was only partially supported.

Table 5. CSR Areas by Size, Controlling for Industry Type (n=53)

Type	Mean	Std. D	Range	r	*p*
Manufacturing	2.7	2.34	0-7	.03	.43
Non-manufacturing	1.2	1.21	0-4	.49	.03
Whole group	2.3	2.17	0-7	.10	.25

Hypothesis 3:

Hypothesis 3 stated that there are significant differences between business types and the number of corporate social responsibility areas addressed on company Web pages. Hypothesis 3 was tested with an Independent-Samples t-test. Table 9 shows the results of the test. The manufacturing firms had more CSR areas (M = 2.66) than the non-manufacturing companies (M = 1.20). The t-test results supported the hypothesis (t = 2.97, $p = .005$) with 95 percent confidence (see Table 6).

Table 6. Industry Type by CSR Areas (n=53)

Type	N	Mean	Std. Deviation	Range
Manufacturing	38	2.66	2.34	0-7
Non-manufacturing	15	1.20	1.21	0-4

$t = 2.97$, $p = .005$, df = 47.

DISCUSSION AND CONCLUSIONS

The purpose of this study was to investigate the current status of Web usage by large Chinese corporations, especially the way these firms use their Web pages to support corporate social responsibility performance. A content analysis was used to examine the Web pages.

Overview of the Findings

Results from the previous section indicate that 53 percent of *Yazhou Zhoukan* top 100 Chinese companies had set up Web pages. Among the companies that had Web pages, manufacturing firms accounted for 72 percent. Following that is transportation, communications, electric, gas & sanitary services, which represented 11 percent, and finance, insurance & real estate, which accounted for nine percent. Only 23 percent of the Web pages had online business services. The most frequently addressed social responsibility areas were environmental protection, education, quality of work life, and community involvement. Most of the firms in the sample of large Chinese companies use their Web pages to announce their cyberspace presence, to provide customers with useful information, to attract visitors to browse their products and services, and to collect responses from visitors or customers.

Corporate Social Responsibility

Environmental protection and education were CSR issues addressed the most frequently by these big companies. This is consistent with the current situation in China. China failed to protect its natural environment during the last century. From the beginning to the middle of the twentieth century, China had experienced foreign invasions and civil wars. Barely recovered from the wars and natural disasters in the 1950s, China experienced ten years of Cultural Revolution, during which culture and the natural environment suffered serious damages. Since the open-door policy in 1979, China has been vigorously promoting industrial development and has neglected pollution control and environmental protection. As a result, the environment has been seriously damaged and in some places pollution has become a major problem. One of the major pollution sources is the manufacturing process.

Now the Chinese government has realized the seriousness of these problems and has passed and upgraded an increasing number of laws and regulations to protect the environment. Environmental protection has been a key component of several Five-Year Plans and is the theme of the new century. By most indications, the government at the highest levels is serious about environmental protection (Stover, 2000). In response to the government's call and in line with laws and regulations, most enterprises have begun to pay special attention to environmental issues and to communicate their environmental activities, which can explain why environmental protection was the most frequently addressed topic on the big companies' Web pages.

Education is also a great concern in China. Although the Chinese government has articulated the importance of education, it has not paid enough attention to it. The neglect is reflected in the government's lack of support to intellectuals and lack of funds for educational institutes. Now the government is actively advocating support to education. For example, Premier Zhu Rongji in his 2000 work report called for support to education from various sources. In response to the government's call, big enterprises made their supporting efforts through collaborating with academic institutes, setting up scholarships, and donating funds and equipment to educational institutes or foundations such as the Project Hope (see Appendix 2). The Project Hope is a social welfare program initiated by the China Youth Development Foundation in 1989 to mobilize Chinese and foreign materials and financial resources to help bring dropouts back to school, to improve educational facilities and to promote primary education in China's poverty-stricken areas. Many enterprises donate funds or materials either to the China Youth Development Foundation or directly to the local government to build Hope primary schools.

The third frequently addressed area, quality of work life, is related to the social and cultural characteristics of China. In a collectivist country like China, people regard the collective where they work as their second home. Consequently, the company or organization takes care of more aspects of employees' life than would be expected by companies in capitalist countries like the United States. The list of the recorded activities (see Appendix 2) shows that these companies organized various recreational activities for employees. They also maintained day-care centers. Most Chinese enterprises, specially middle and big enterprises, maintain day-care centers, elementary schools, colleges, clinics, choirs or art troupes, and sport teams, although they do necessarily report these on their Web sites. In Esrock and Leichty's (1998) study, quality of work life ranked the lowest among all the CSR areas. This probably reflected the social and cultural difference between China and the United States, although this difference is becoming smaller because of U.S. companies' efforts in improving employee work life as a result of low unemployment level in recent years.

Community and civic involvement activities included sponsoring and/or participating in various community or national activities such as sports meetings, contributing funds or materials to community organizations, and supporting community developmental projects. Investing in west China development is included in this category, because it is considered as a patriotic action as well as a business opportunity. The Chinese government is trying to develop the West in order to exploit more natural resources and also ease population pressure along the crowded east China coast. Although the government is encouraging businesses and people to go to the West and has issued some advantageous policies, investing in the West still involves great risks. Most enterprises are not willing to, and probably cannot afford to, take those risks. Therefore some companies report their investment in the West as a patriotic action in response to the Party's call.

Economic and institutional reforms, environmental protection, educational development, and west China development are hot topics that frequently appear on the Chinese Internet news headlines. Thus it is not surprising to find these areas addressed frequently on big companies' Web sites. Other CSR areas, such as children, elderly, health, fair business practices and safety issues, are also concerns of the Chinese government and the public.

Market Value, Industry Type, Web Presence, and CSR

The raw data showed that companies of higher market value overall were more likely to have a Web site, although the differences were not significant. However, when industry type was controlled, the pattern for manufacturing firms approached significance ($p = .06$). The raw data showed that industries in manufacturing had the largest number and highest percentage of companies that had Web pages. The results indicated that there was no significant relationship overall between the market value of the company and the number of corporate social responsibility areas addressed on the company's Web site, which did not support Esrock and Leichty's (1998) analysis of U.S. firms. However, for non-manufacturing industries, companies with higher market value displayed a significantly greater number of CSR areas. The manufacturing industry firms had significantly more corporate social responsibility areas addressed on company Web pages than the non-manufacturing industry companies.

Conclusions

As described above, the size of the company indicated by market value was not related to the likelihood of having a Web site. However, the relationship approached significance for manufacturing companies. A larger sample might detect a difference. Market value was related to corporate social responsibility areas for non-manufacturing firms.

The results showed that manufacturing firms had more corporate social responsibility areas on their Web pages. Many of these manufacturing firms produce household appliances or electronic products such as computers, and therefore they have more and a wider range of customers. Thus it was not surprising to find that the Web pages of these firms addressed more social responsibility issues. The online marketing potential of the World Wide Web was underutilized by these Chinese enterprises, which supported the findings of Liu's (1997) study of U.S. firms.

These Web pages primarily reflected government priorities for external social responsibilities such as environmental protection, education, and civic involvement, and cultural expectations for internal social responsibilities such as quality of work life. These analyses showed that the Internet use by big Chinese enterprises was still in its infant stage and had much to be improved. The number of corporate social responsibility areas addressed on these corporate Web pages was very limited, averaging 2.2. This result indicated that these Chinese corporations were not fully using the Internet as a tool to improve their public image, which supported analyses from previous studies (Esrock & Leichty, 1998; Kent & Taylor, 1998; Marken 1998; White & Raman, 1999). It probably also indicated that although Chinese enterprises had started to pay attention to corporate social responsibility, the concept had not yet become their priority. As mentioned in previous sections, China is still a developing country and is performing a series of reforms on state-owned enterprises. Making a profit is the current priority of these enterprises. At Carroll's CSR pyramid, economic responsibility serves as a foundation stone undergirding the other three responsibilities (legal, ethical, and philanthropic), and thus making a profit is only the first level of corporate social responsibility fulfillment. The results of this study show that these top Chinese firms were still at this first level, but had started moving towards the higher levels. They will need to strive to simultaneously fulfill the total corporate social responsibilities. As Carroll pointed out, the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations, and each responsibility is to be fulfilled at all times, not in a sequential fashion.

Limitations and Recommendations

The present study has several limitations. First, the findings of this study are limited to one special group. Second, because corporate use of the Web and the content of the Web pages are changing rapidly, these findings are time-bound and may not represent current or future status. Third, because of lack of previous research, the study uses American researchers' findings and analysis frameworks as guidelines, which might not be proper for Chinese businesses. It also has to be noted that the findings only show how these Chinese firms portray themselves as socially responsible corporate. Thus the results might have not reflected the actual performance of these firms.

Future studies can use a larger sample with a variety of industry types to better illustrate the current situation of Chinese corporate Web usage. If possible, a survey and/or in-depth interviews of the Web masters of these Web sites would shed light on how corporations understand the public relations functions of corporate Web pages and what they believe are important social responsibility areas that should be addressed or used on the Web. This would also help develop a category frame appropriate for Chinese corporations. Future studies can also investigate the overall quantity or quality of the material in each social responsibility area so as to give a more truthful picture of the corporate use of the Web. Public relations professionals should continue to conduct research on Internet development and corporate use of the Web so as to help corporations improve their public relations image in cyberspace.

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Table 1. Components of Corporate Social Responsibility

Authors	Components of CSR
Sethi (1975)	1. Search for legitimacy, 2. Ethical norms, 3. Social accountability for corporate actions, 4. Operating strategy, 5. Response to social pressures, 6. Activities pertaining to governmental actions, 7. Legislative and political activities, 8. Philanthropy.
Bernays (1975)	Economic growth and efficiency, education, employment and training, civil rights and equal opportunity, urban renewal and development, pollution abatement, conservation and recreation, culture and the arts, medical care and government.
Wood (1991)	**Principles of corporate social responsibility:** Institutional principle: Legitimacy Organizational principle: Public responsibility Individual principle: Managerial discretion **Process of corporate social responsiveness** Environmental assessment, Stakeholder management, Issues management **Outcomes of corporate behavior** Social impacts, Social programs, Social policies.
Esrock & Leichty (1998)	1. Community/Civic Involvement, 2. Ecology/Environment, 3. Education, 4. Charity/Foundations, 5. Children, 6. Health, 7. Volunteerism, 8. Diversity, 9. Arts, 10. Fair Business Practices/Politics, 11. Worker Safety, 12. Product Safety, 13. Quality of Work Life, 14. Other.
Gill (1999)	Environment, women's advancement, minority advancement, charitable giving, community outreach, family benefits, workplace issues, and social disclosure.
Maignan & Ferrell (2000)	**Economic citizenship**: Maximize profits, lower operating costs, monitor employees' productivity, establish long-term strategies **Legal citizenship**: Comply with laws and regulations, encourage workforce diversity, prevent discrimination **Ethical citizenship**: Have a comprehensive code of conduct, be trustworthy and fair, provide employees with confidentiality in reporting workplace misconduct, provide full and accurate information to all customers **Discretionary citizenship**: Support employees, give adequate contributions to charities, save energy and reduce waste, encourage partnerships.

Table 2. Corporate Social Responsibility Areas and Definitions

1. **Ecology/environment:** Efforts in pollution control, environmental protection and improvement, and energy and resources saving or conserving.

2. **Community/civic involvement:** Any activities that are not directly related to the company's sales or services and are not listed below. Community/civic involvement activities are intended to improve civic development or the development of the community where the company locates, including donating funds and/or materials to the community, helping to build specialized community districts, and helping protect the community or the country, etc. Community/civic involvement activities that relate to Education, Children, Elderly, Health, Volunteerism, Arts and national or regional Sports are listed below.

3. **Children:** Support provided to children that are not listed in other categories separately listed below, which include Education, Health, Volunteerism, Arts and Sports.

4. **Elderly:** Support provided to senior citizens that are not listed in other categories separately listed below, which include Education, Health, Volunteerism, Arts and Sports.

5. **Education**: Donating funds or equipment to universities or schools; donating funds to charity or foundations to build elementary or secondary schools; donating funds to support children to go back to school; setting up scholarships to award students or teachers; maintaining a school (includes kindergarten, elementary or high schools); sponsoring education centers.

6. **Health:** Promoting health programs; sponsoring health seminars; discussing health problems associated with products such as TV, cell phones, and computers; donating funds to health institutions such as hospitals, daycare centers, and nurseries.

7. **Volunteerism:** Setting up information help desks in the community on weekends to share knowledge and skills; offering free services to people living in the community.

8. **Arts:** Sponsoring arts activities or organizations such as museums, choirs, art galleries; maintaining a historical or science museum.

9. **Sports:** Sponsoring national sports games; maintaining a provincial sports team such as a soccer team.

10. **Fair business practices:** Promoting good quality products; fighting against forgeries; online discussions of advantages and disadvantages of "on sale" battles.

11. **Worker safety:** Promoting safe working conditions.

12. **Product safety:** Making products safer; research on product safety; promotion of safe products; online discussions of safe products.

13. **Quality of work life:** Employee recreational activities; improvement of work conditions; employee training programs; promotion of employee health; maintaining daycare centers for employees' children.

Figure 1. Percentages of Corporate Social Responsibility Areas (n=53)

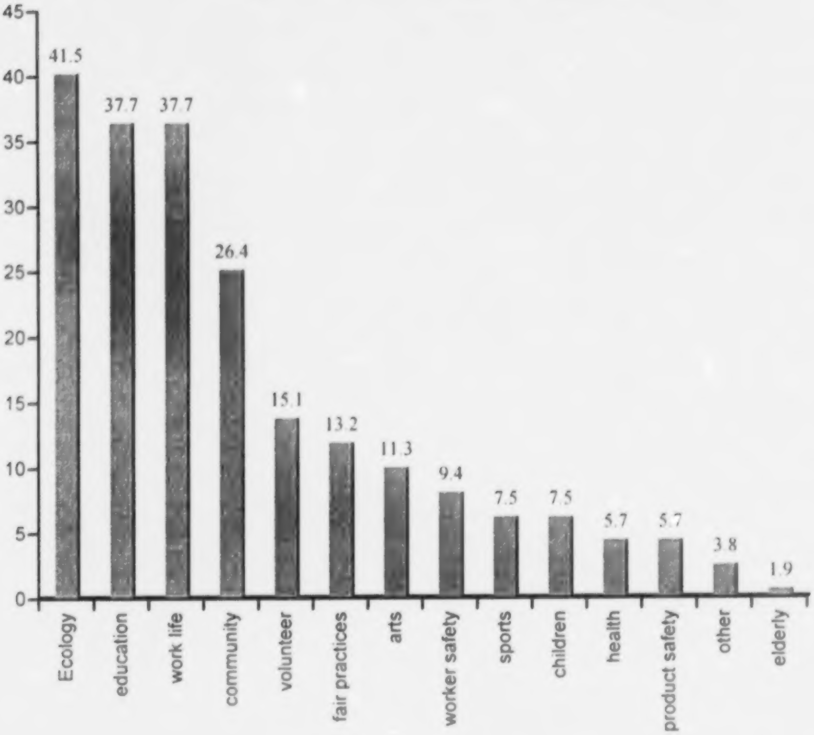
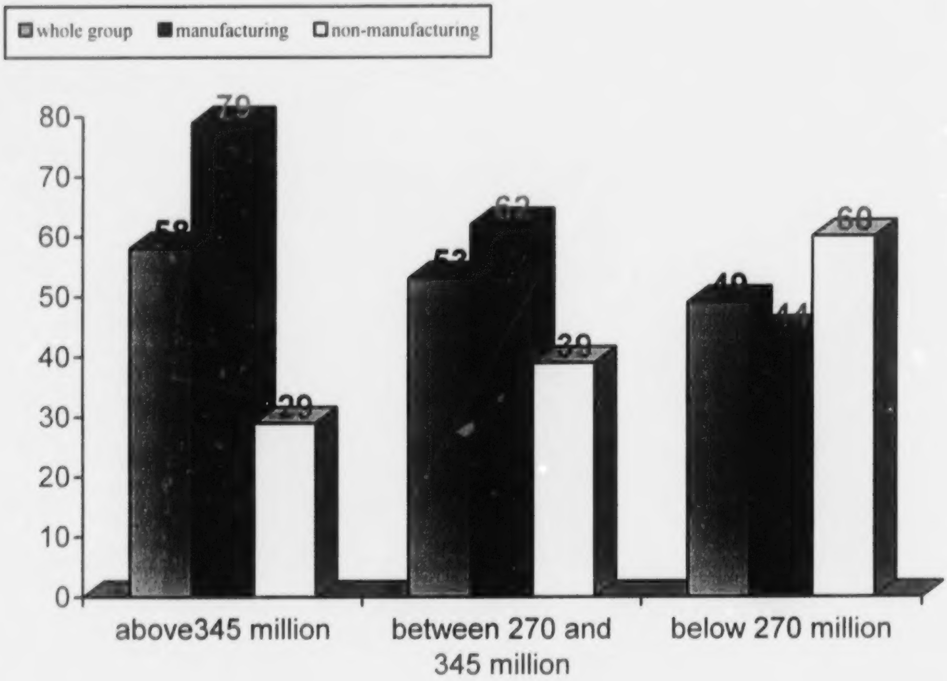


Figure 2. Percentages of Web Site by Market Value (n=100)



Appendix I. SIC Division Structure

A. Division A: Agriculture, Forestry, And Fishing
  Major Group 01: Agricultural Production Crops
  Major Group 02: Agricultural Production Livestock And Animal Specialties
  Major Group 07: Agricultural Services
  Major Group 08: Forestry
  Major Group 09: Fishing, Hunting, And Trapping
B. Division B: Mining
  Major Group 10: Metal Mining
  Major Group 12: Coal Mining
  Major Group 13: Oil And Gas Extraction
  Major Group 14: Mining And Quarrying Of Nonmetallic Minerals, Except Fuels
C. Division C: Construction
  Major Group 15: Building Construction General Contractors And Operative Builders
  Major Group 16: Heavy Construction Other Than Building Construction Contractors
  Major Group 17: Construction Special Trade Contractors
D. Division D: Manufacturing
  Major Group 20: - Food And Kindred Products
  Major Group 21: Tobacco Products
  Major Group 22: Textile Mill Products
  Major Group 23: Apparel And Other Finished Products Made From Fabrics And Similar Materials
  Major Group 24: Lumber And Wood Products, Except Furniture
  Major Group 25: Furniture And Fixtures
  Major Group 26: Paper And Allied Products
  Major Group 27: Printing, Publishing, And Allied Industries
  Major Group 28: Chemicals And Allied Products
  Major Group 29: Petroleum Refining And Related Industries
  Major Group 30: Rubber And Miscellaneous Plastics Products
  Major Group 31: Leather And Leather Products
  Major Group 32: Stone, Clay, Glass, And Concrete Products
  Major Group 33: Primary Metal Industries
  Major Group 34: Fabricated Metal Products, Except Machinery And Transportation Equipment
  Major Group 35: Industrial And Commercial Machinery And Computer Equipment
  Major Group 36: Electronic And Other Electrical Equipment And Components, Except Computer Equipment
  Major Group 37: Transportation Equipment
  Major Group 38: Measuring, Analyzing, And Controlling Instruments; Photographic, Medical And Optical Goods; Watches And Clocks
  Major Group 39: Miscellaneous Manufacturing Industries
E. Division E: Transportation, Communications, Electric, Gas, And Sanitary Services
  Major Group 40: Railroad Transportation
  Major Group 41: Local And Suburban Transit And Interurban Highway Passenger Transportation
  Major Group 42: Motor Freight Transportation And Warehousing
  Major Group 43: United States Postal Service
  Major Group 44: Water Transportation
  Major Group 45: Transportation By Air
  Major Group 46: Pipelines, Except Natural Gas
  Major Group 47: Transportation Services
  Major Group 48: Communications
  Major Group 49: Electric, Gas, And Sanitary Services
F. Division F: Wholesale Trade
  Major Group 50: Wholesale Trade-durable Goods
  Major Group 51: Wholesale Trade-non-durable Goods

G. Division G: Retail Trade
    Major Group 52: Building Materials, Hardware, Garden Supply, And Mobile Home Dealers
    Major Group 53: General Merchandise Stores
    Major Group 54: Food Stores
    Major Group 55: Automotive Dealers And Gasoline Service Stations
    Major Group 56: Apparel And Accessory Stores
    Major Group 57: Home Furniture, Furnishings, And Equipment Stores
    Major Group 58: Eating And Drinking Places
    Major Group 59: Miscellaneous Retail
H. Division H: Finance, Insurance, And Real Estate
    Major Group 60: Depository Institutions
    Major Group 61: Non-depository Credit Institutions
    Major Group 62: Security And Commodity Brokers, Dealers, Exchanges, And Services
    Major Group 63: Insurance Carriers
    Major Group 64: Insurance Agents, Brokers, And Service
    Major Group 65: Real Estate
    Major Group 67: Holding And Other Investment Offices
I. Division I: Services
    Major Group 70: Hotels, Rooming Houses, Camps, And Other Lodging Places
    Major Group 72: Personal Services
    Major Group 73: Business Services
    Major Group 75: Automotive Repair, Services, And Parking
    Major Group 76: Miscellaneous Repair Services
    Major Group 78: Motion Pictures
    Major Group 79: Amusement And Recreation Services
    Major Group 80: Health Services
    Major Group 81: Legal Services
    Major Group 82: Educational Services
    Major Group 83: Social Services
    Major Group 84: Museums, Art Galleries, And Botanical And Zoological Gardens
    Major Group 86: Membership Organizations
    Major Group 87: Engineering, Accounting, Research, Management, And Related Services
    Major Group 88: Private Households
J. Division J: Public Administration
    Major Group 91: Executive, Legislative, And General Government, Except Finance
    Major Group 92: Justice, Public Order, And Safety
    Major Group 93: Public Finance, Taxation, And Monetary Policy
    Major Group 94: Administration Of Human Resource Programs
    Major Group 95: Administration Of Environmental Quality And Housing Programs
    Major Group 96: Administration Of Economic Programs
    Major Group 97: National Security And International Affairs
K. Nonclassifiable Establishments

Source: Occupational Safety & Health Administration, U.S. Department of Labor. Online, available at http://www.osha.gov/cig-bin/sic/sicser5

Appendix 2. Actual CSR Activities

1. Community/civic involvement

- demonstration station for transportation safety management
- participation in community civilization (civility) development
- help develop "color TV villages"
- invest in west China development/4*
- help with water conservancy and police network projects
- support "civilized community" development
- build "informationalized" community districts
- set up a militia battalion
- sponsor a "cultural service for the frontier force" project
- donate funds and materials to various organizations
- donate money or goods to unemployed workers
- take in (annex)losing enterprises
- donate funds to disaster areas/3
- donate computers to Tibet
- contribute to public good or public welfare
- make various donations

2. Ecology/Environment

- promote environmentally friendly products/10
- set up a environment protection subsidiary company/2
- environment protection/4
- plant trees
- set up a EHS (environment, health, & safety) department
- save energy during manufacturing process/3
- promote energy saving products
- promote environmental protection /3
- set up environmental protection facilities
- build "garden like" factory
- be awarded as "environmental protection model" company
- establish an environmental education project
- set up a "cleaning squad"

3. Education

- collaboration with a university/4
- donate funds to a university/4
- donate funds to the Hope Project or build Hope Elementary schools/3
- donate funds to community educational activities or organizations/2
- maintain an elementary school, high school and/or a kindergarten/2
- maintain a science museum
- set up a united education center – remote education network
- setup online school
- set up laundries in universities and donate washing machines
- set up a children's scholarship

- set up a teacher's scholarship/4
- set up an educational fund
- support elementary and middle school education
- hold computer knowledge seminars in universities
- cosponsor an academic festival
- sponsor a children's science magazine
- sponsor composition contests
- CEO gives lectures in Harvard business school

4. Children
- promote "care about the next generation" projects
- donate funds to Song Qingling Foundation (a children's foundation)
- donate funds to the Youth Foundation
- donate funds to children's charities

5. **Health**
- discuss how to protect health while using computers
- donate funds to health organizations
- discuss color TV radiation and health

6. Volunteerism
- offer free service to the community (in holidays and on weekends)/2
- offer free online privacy protection guidance
- offer free training courses to unemployed workers
- offer free maintenance for flood control projects
- take part in disaster rescue
- eye protection volunteer activities
- employee blood donation
- other volunteer activities

7. Arts
- maintain a museum
- sponsor a children's art festival
- donate funds to a children's art troupe
- sponsor a singing competition
- sponsor an art exhibition
- sponsor a photography contest

8. Sports
- cosponsor Chinese chess games
- sponsor the national men's volleyball team
- sponsor an international car racing competition
- maintain or sponsor a provincial soccer team
- sponsor Chinese chess games
- sponsor basketball games

9. Fair business practices

- promoting good quality products
- online discussions of "on sale" battles and fair competition/5
- promote fair competition and warn customers of forgeries
- fight against smuggling

10. Worker safety

- promote safe working conditions/4
- set safe regulations
- promote worker safety responsibility policy

11. Product safety

- discuss centennial bug problems of electronic products and develop solution projects
- promote safe products (anti-radiation cell phone and microwave cooker)
- network safety (privacy)

12. Quality of work life

- employee training/10
- education of knowledge about law
- recreational activities/8 (mountain climbing, table tennis games, photography competitions, choir competitions, sports meetings, new year's party, concerts
- employee health exams/2
- International Women's Day activities/3
- maintain an employee choir
- participate in the city sports games/2
- maintain an employee college
- maintain an employee soccer team
- maintain a kindergarten for employees' children/3
- hold monthly collective birthday parties for employees
- set up Model Female Employee Demonstration Post
- display art works by employees/2
- set up "help employees in difficulties" funds
- hold culture and art festival

13. Elderly

- help senior citizens in the community

* The number indicates how many sites demonstrated this activity.

Appendix 3. Data Analysis Chart

Corporate Social Responsibility Areas

Company Name (rank)	Date of Site Review	Industry Type (SIC)	Size (market value)

Components	Presence	Communication Mode	Comments
CSR Areas			
Community/civic involvement			
Ecology/Environment			
Education			
Charity/Foundations			
Children			
Health			
Volunteerism			
Diversity			
Arts			
Fair business practices/Politics			
Worker safety			
Product safety			
Quality of work life			
Elderly			
Other			

Investigating Corporate Social Responsibility: A Content Analysis of Top Chinese Corporate Web Pages

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ABSTRACT

The study investigated the current status of Web usage by large Chinese firms, especially the way they use their Web pages to support corporate social responsibility. The most frequently addressed social responsibility areas were environment protection, education, quality of work life, and community involvement. Market value was related to corporate social responsibility areas for non-manufacturing firms. Manufacturing firms had more corporate social responsibility areas on their Web pages.

Key words: corporate social responsibility, Web pages, Chinese corporate

The Effect of the World Wide Web on Relationship Building

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Abstract

The Effect of the World Wide Web on Relationship Building

The purpose of this paper is to examine the relationship between Web characteristics and perceptions toward relational components. A 2 (low interactivity and high interactivity) × 2 (text-oriented and multimedia-oriented) experiment was designed with 197 participants to test this purpose. The outcomes showed that interactivity has significant effects on relationship building. However, the interaction effects between interactivity and medium composition suggest that nonessential arrangement of interactivity and multimedia did not enhance positive perceptions of relationships with the organizations. Interactivity showed the main effect, however multimedia orientation did not. The application of interactivity on the Web was discussed for better relationship building.

The growth of the World Wide Web has changed the way of practicing public relations. The World Wide Web now helps organizations reach a wide audience efficiently through time and cost savings. Web sites also represent status symbols for their organizations (White & Raman, 1999).

In line with the rise of Internet use, relationship building has become a "buzzword" in public relations. The purpose of public relations is to building favorable relationships with publics through two-way symmetrical communications (Grunig & Hunt, 1984; Ledingham & Bruning, 2000). Two-way communication and the theory of symmetry can be neatly related to the characteristics of a new medium, such as interactivity or reciprocal performance. Thus, it is important to examine the effects of using the Web on the relationship between organizations and the publics.

Few studies have examined the effects of the Web in the context of assessing public perceptions, instead most recent studies of the Web have focused mainly on the perspective of content providers. The recipients' (publics') perceptions should be considered in measuring the effectiveness of this new medium. The study of the Web should be extended to a valid measurement of the effects on the general public, who is the message recipients and users.

Very few studies have directly examined the degree to which genetic factors might influence publics' perceptions of relationships with the organizations. Thus, the purpose of the study is to investigate the impact of interactivity and medium arrangement in the Web on the publics' perceptions of relationships with the organizations with an experimental method. In other words, this paper examines how the public perceives relational components toward organizations categorized by Web characteristics after logging on to different organizations' Web sites. In order to measure the Web-based factors, we assume interactivity and multi media arrangement are important factors as independent variables in the Web site. Thus, we examined the publics' perceptions of relationships with the organizations based on their Web surfing experience.

Although the potential impact of the Web on public relations has been well recognized, little empirical research has been done to examine how intrinsic characteristics of Web-based communication influence relationship building between the organization and publics in the context of relationship management. Thus, the importance of the study lies in the empirical exploration of Web effects on the relationship between the organization and publics.

LITERATURE REVIEW

The Usage of World Wide Web and Public Relations

The use of the World Wide Web around the world has been rapidly expanding. According to the Computer Industry Almanac (2001), the number of Internet users around the world is constantly growing. By 2002, 490 million users consisting of business, educational and home users are expected to have Internet access. The U.S. has a lead in Internet users with an estimated 140 million by the end of 2000. The use of the Internet by U.S. college students especially is growing dramatically. The Greenfield Online (2001) study reported that around 84 percent of students would have Web access from some campus location. In short, surfing Web sites for a wide range of purposes in daily lives has now become a common activity among young U.S. college students.

Although nearly a decade has passed since the introduction of the Web, most studies of the Web to date have been limited to content analysis (Esrok & Leichty, 2000;

Esrok & Leichty, 1998; Ho, 1997; Hoffman & Novak, 1995; Liu, 1997; Jo & Jung, 2000; Vattyam & Lubbers, 1999). Public relations studies of the World Wide Web have focused on the perceptions of practitioners through qualitative interviews (Hill & White, 2000; White & Raman, 2000; Kent & Taylor, 1998; Parker, 1998). These kinds of studies focused mostly on the technological capability of the Web and its applications to public relations practices. As White and Raman (2000) pointed out, public relations practitioners admitted they do not know whether their websites are effective or not from the viewpoint of public. Thus, the study of Web and public relations needs to move forward in terms of "effects."

Most scholars agree with the potential strengths and weaknesses of the Web compared to other media. Wright (1998) confirmed the general strengths of the Internet in terms of worldwide reach, saving paper, inexpensive research, low-cost e-mail and easy access to information. In contrast, he pointed out the weakness of the new medium as high cost set up and maintenance, unregulated content, slow to get on line, too much e-mail and inhuman communication. The lack of gatekeepers created pros and cons among practitioners and scholars. Recently Flanagin and Metzger (2000) addressed the issue of Internet information credibility. They found that Internet information is as credible as other media such as television, radio and magazine. However, newspapers are more credible than the Internet in terms of information credibility. Newhagen and Rafaeli (1996) also proposed five characteristics of the Internet: multimedia, hyper-textuality, packet switching, synchronicity, and interactivity.

Interactivity and World Wide Web

One of the distinguishing characteristics of the Web is its unique interactive feature. Interactivity has been recognized as a critical component in computer-mediated communication (Morris & Ogan, 1996; Rafaeli & Sudweeks, 1997). Steuer (1992) defines interactivity as the extent to which users can participate in the content in a computer- mediated environment. He identifies speed of interaction, range and mapping as three key factors of interactivity. Rogers (1995) defines interactivity as "the degree to which participants in a communication process can exchange roles and have control over their mutual discourse (p.314)." Rafaeli and Sudweeks (1997) define interactivity as "a condition of communication in which simultaneous and continuous exchange occur, and these exchanges carry a social, binding force (p.4)." The definitions of interactivity include the following three kinds: interaction between senders and receivers, humans and machine, and messages and its users (Cho, 1999). Even though the definitions of interactivity vary among the scholars, the common characteristics reflect mutual relational interactions between the message provider and the recipient.

Ha and James (1998) define interactivity as "the extent to which the communicator and the audience respond to, or are willing to facilitate, each other's communication needs (p.461)." They emphasize individual differences in terms of communication needs. They propose five dimensions of interactivity: *playfulness, choice, connectedness, information collection* and *reciprocal communication. Playfulness* refers to the extent to which users feel excitement or psychological gratification. *Choice* refers to the extent to which users can navigate and choose. Choice availability allows individuals to navigate more content on a Web site. *Connectedness* allows users to jump from one point to another point easily. *Information collection* refers to the likelihood of data gathering by visitors. In fact, the information collection of interactivity depends on the willingness to provide information through websites. *Reciprocal communication* can be defined as a two-way communication. The organizations expect feedback or responses from visitors. The reciprocal dimension parallels with the two-way models in public relations (Grunig & Hunt, 1984; Grunig & L. Grunig, 1992). Thus, *reciprocal communication* enhances the dialogue and exchangeable views between the message sender (the organization) and recipients (publics).

Advertising scholars have also been investigating the relationship between interactivity of Web advertising and overall effectiveness (Harvey, 1997; Philport & Arbittier, 1997). Harvey (1997) argued that interactivity is one component of the persuasion process in his expanded interactive media model. However, the Web advertising study did not go further to investigate the impact of relational features on consumers' purchase decision even though Philport and Arbittier (1997) thought the nature of interactive advertising should be changed from persuasion to relationship. Advertising scholars have certain limits for clarifying the comprehensive effectiveness of a new medium as long as the study focus lingers on interactive advertising and e-commerce.

O'Malley and Irani (1998) conducted an experiment to assess the effect of interactivity and information amount on predicting attitude change and behavioral intention. They found that higher amounts of information and interactivity would increase the intention of revisiting the Web site. They concluded that the concept of interactivity in the Web is related to relationship building through attitudinal and behavioral change.

Johnson (1997) states that the Web could facilitate media relations, employee communication, government relations and customer relations due to its interactivity.

In sum, interactivity could play a key role in the Web, distinguishing the medium from other traditional media. The intrinsic interactivity can enhance the mutual relationship and collaboration between the message sender (organization) and receiver (public).

Text Oriented vs. Multimedia Oriented

Like traditional media, the Web consists of text and graphics. More Websites, however, are incorporating multimedia functions such as audio, video and graphics. Hoogeveen (1997) defines multimedia as "multiple perceptual representation media such as speech, music, text, graphic, still, animation and video, are used in an integrated manner (p.151)." The information processing of Web-based communication is a complex process (Eveland & Dunwoody, 1999). Earlier studies identify the strength of their combination of text and image. Severin (1967) theorizes that textual information is enhanced by the addition of graphic images, providing more cognitive cues. Griffin and Stevenson (1992) found that the combination of texts and graphics increases the understanding of news content.

In contrast, Lang (2000) argues that individuals have a limited capacity to process the information. Lang argues that even the addition of multimedia may result in increasing recognition memory, but might result in decreased recall memory. Heller (1990) argues that excessive multimedia might result in interference, and cognitive overload when an individual processes information.

Sunder (2000) finds that when texts are combined with pictures or audio in a Web environment, message receivers perceive the content more efficient than any other multimedia combination. His findings suggest that Web users do not necessarily perceive all multimedia functions as efficient. In sum, the addition of multimedia to text-based contents may increase the cognitive ability to process the information, but overloading multiple media can cause distractions and limit information processing.

Relationships in Public Relations

Organization-public relationships include both economic and humanistic aspects. Offering higher than publics' expectations to the organization is a key for maintaining favorable relationships from the economic viewpoint. The organization has to offer products or services that overcome the desired level of satisfaction to obtain continued instrumental benefits (Thomlison, 2000). However, loyalty to the organization possesses more than economic costs and benefits. The public's decision-making includes emotional inclination, schemas, and attitudinal preferences (Thomlison, 2000). Sometimes people choose products because they feel comfortable through continued use. Loyalty can explain this humanistic view. Loyalty represents a long-term, committed, and emotion-oriented relationship (Fournier, 1998). Thus, public relations practitioners should consider both aspects of relationships to build favorable relationships with publics: offering quality products or services beyond publics' expectation level and fostering committed relationships through empathic interchange.

Relationships have several developmental stages. Knapp and Vangelisti (1992) argued that relationships usually move from an initiating stage to a bonding stage. When the relationship is initiated, maintaining the relationship becomes crucial. Stafford and

Canary (1991) suggested five maintenance strategies: positivity, assurances, openness, sharing tasks and social networks. Through these stages, related parties try to obtain several relational characteristics through out the relationship. These include control mutuality (the degree that the partners agree on the power control), liking, commitment, and relational satisfaction (Canary & Stafford, 1992).

By referencing relationships in other disciplines, the organization-public relationship can be defined as the economic and humanistic interchange between the organization and publics to obtain quality relational outcomes through optimal initiation and maintenance strategies. Relationship management also can be defined as "the development, maintenance, growth, and nurturing of mutually beneficial relationships between organizations and their significant publics (Thomlison, 2000, p. 178)."

Ferguson (1984) suggested that public relations practitioners use the following tools to evaluate the quality of an organization's relationship with the public: dynamic vs. static, open vs. closed, mutual satisfaction, distribution of power and mutual understanding, agreement and consensus. Grunig and Ehling (1992) suggested reciprocity, trust, credibility, mutual legitimacy, openness, mutual satisfaction, and mutual understanding as the key elements of the organization-public relationship. Bruning and Ledingham (1998) suggested five organization-public relationship indicators: open communication, the level of trust, the level of involvement, financial investment in the communities, and long-term commitment.

Hon and Grunig (1999) summarized maintenance features of interpersonal relationships and outcomes of relationships from the interpersonal and public relations literature. These are positivity, openness, assurance, networking, sharing of tasks, trust, control mutuality, commitment, satisfaction, communal relationship, and exchange relationship. Through a more empirical methodology, Kim (2000) collected and factor-analyzed all possible items to crystallize the organization-public relationship from the interpersonal, relationship marketing, and public relations literature. This study developed a valid and reliable four-dimension scale with 16 items for measuring the organization-public relationship through exploratory and confirmatory factor analyses. Four dimensions include trust, commitment / satisfaction, local and community involvement, and reputation.

Broom, Casey and Ritchey (1997) suggested that relationship formation and maintenance represents a process of mutual adaptation and contingent responses between parties. They believe that relationships between an organization and its key public are phenomena that can be studied as distinct from the perceptions of the relationship held either by an organization or its key publics. However, how to conceptualize the organization-public relationship is still an emerging field in public relations.

Web Characteristics and Relationship Building

The dominant paradigm in communication research usually adopts the transmission theory that emphasizes the source-receiver linear relationship (McQuail,1997; Newhagen & Rafaeli, 1996). But public relations phenomena are more complex than a simple source-receiver relationship. Public relations has valued the two-way communication between the organization and publics as "excellent public relations" (Grunig & L. Grunig, 1992). Feedback and activism are also important components in public relations (Grunig & Hunt, 1984).

Audience activism has become one component of modern communication and public relations processes (Dozier & Lauzen, 2000). The role of audiences has been augmented in the communication process. The audience power is related to the interactivity of media for better two-way communications and relationship building (Marken, 1998/1999; Kent, 1998/1999). Thus, the advent of the Internet, considered as an interactive medium, can have significant effects on relationship building between the organization and publics. Public relations practitioners have realized the fact that the Web can develop long-term relationships and is a corporate-wide issue, not a product-related issue (Marken, 1998/1999).

The dimension of multimedia/text orientations, however, becomes another issue. The multimedia orientation on the Web can be interpreted as one of interactive endeavors made by the organization (Bezjian-Avery, Calder, & Iacobucci, 1998). More multimedia-oriented Web messages may produce better effectiveness than traditional advertising in the context of awareness and persuasion. However, empirical results have showed that the impact of multimedia-oriented Web advertising varies by the individual's visual or verbal orientations (Bezjian-Avery et al., 1998). Individuals who are relatively verbal-oriented did not prefer multimedia-oriented advertising. Thus, in the context of relationship building, the effect of multimedia orientation is mixed.

Computer-mediated communication (CMC) scholars also have conflicting perspectives on on-line relationships (Parks, 1996). CMC can contribute to relationship building or create more impersonal and shallow interpersonal relationships. However, empirical results on on-line relationships showed that CMC could enhance commitment, interdependence and understanding between parties (Parks, 1996).

Kent and Taylor (1998) argued that the organization facilitates relationship building with public through the World Wide Web by emphasizing more dialogic communication. However they admitted that the World Wide Web still remains underutilized by public relations practitioners and scholars for building relationships with public (Cooley, 1999).

Building relationships through the interactive Web pertains to the public relations field in the context of mass communication research and will lead to the enhancement of the organization's reputation through better interactions with public (Cooley, 1999; Kent & Taylor, 1998). The interactive function of the Web gives public relations an ideal opportunity to reach publics and establish a dialogic relationship. A review of the previous literature makes it possible to posit the following hypotheses given the fundamental characteristics of the Web.

Hypotheses

H1: High interactivity in the Web positively affects relationship building between the organizations and public more than low interactivity. In other words, high interactivity in the Web will lead to positive perceptions of relationships with the organizations.

A high level of interactivity would increase mutual communications between content providers and message receivers. Conversely, low levels of interactivity would decrease the mutual communication between the organization and publics compared to a high level of interactivity.

H2: Multimedia-oriented Websites positively affect relationship building between the organization and publics more than text-oriented Web sites. In other words, multimedia-orientation on the Web will lead to positive perceptions of relationships with the organizations.

In addition to texts, adding sound and video features in a Website would increase the favorable attitude for the message receivers more than text-oriented Web content.

METHODS

Subjects

Young college students are core users of the Internet[1]. Thus, college students are relevant subjects for this study. Students enrolled in an optional communication course at a southeastern university were asked to participate in a real setting aimed at investigating individuals' perception of relationships toward the corporations. Participation was on a voluntary basis and those who participated received extra credits in the course. One hundred ninety seven undergraduate students participated in the experiment. The subjects were randomly assigned to a 2 (high interactivity vs. low interactivity) × 2 (multimedia oriented vs. text oriented) factorial design. Forty-seven subjects were assigned to the cell of high interactivity and text-oriented content. Forty-nine subjects were assigned to high interactivity and multi-media-oriented content. Forty-eight subjects consist of low interactivity and text-oriented condition. Finally fifty-three subjects were assigned to low interactivity and multi-media-oriented condition.

Stimulus Material

The focus of this study was to investigate how the characteristics of World Wide Web affect the relationship between the organization and publics. Business corporations rather than non-profit organizations dominate most current Websites. Thus, for the purpose of this study, companies' Websites were chosen from the U.S. Fortune 500 list. In addition, companies in the consumer market were prioritized to increase the involvement with the subjects.

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[1] According to the Greenfield Online's survey (www.cyberatlas.internet.com, 2000), more than half of the college students in the U.S will be surfing directly from their wired dorm rooms and 84 percent will have Web access from some campus location.

The problem of the subjects' previous attitude toward the corporations was controlled as a covariance variable (previous attitude toward the corporation) in the analysis. A pilot test was conducted to determine high and low interactivity, text and multi-media orientation.

Eight sample Websites were chosen from interviews with college students. After the subjects in the pretest were given the definition of interactivity, they were asked whether the Website had a certain level of interactivity. The www.fedex.com and www.sony.com sites were determined to be highly interactive, whereas www.pepsico.com, and www.kelloggs.com showed low interactive through *t*- test (high M=.5.68, low M=4.00, p<.001). In content composition, the www.sony.com and www.kelloggs.com showed more multi-media orientation than www.pepsi.com and http://www.fedex.com by *t*-test (multi-media-oriented M=4.81, text-oriented M=2.86, p<.001). A 2 × 2 manipulation was checked through the main questionnaire assessing interactivity and text/multimedia orientation in the next step.

Procedure

The experiment was administered in a real setting. The subjects were asked to visit each Web site at home or school, where they could access the Internet. After surfing the Web sites, the subjects were asked to give their perceptions of the relationship between the companies and themselves. The questionnaires were returned one week after distribution. They were instructed to log on to each Website and surf the site to understand the contents for at least twenty minutes before answering the questions. To avoid the effect of previous experience or established attitude toward the companies, the subjects were asked to answer the questions about their existing attitude toward the companies before the study. The previous attitude was controlled as a covariance variable in the analysis.

Dependent and Control Variables

The dependent variables were measured through the instrument of Hon and Grunig (1999) and Kim (2000) (See Appendix 1). The questions primarily measure the extent to which publics perceive the current relationship with the organizations. Hon and Grunig (1999) propose six indices of relationship: *trust, control mutuality, commitment, satisfaction, communal, and exchange.* Trust represents the organization's soundness in terms of reliability and fairness. Control mutuality focuses on how much management seeks understanding from publics. Commitment is characterized by publics' voluntary attitude toward the organization to continue the relationship. Satisfaction refers to the affective attitude toward the organization. Exchange and communal relationships represent the extent to which an individual perceives relationships in terms of input and output or communal contribution.

Kim (2000) identified additional dimensions of relationships from his factor analyses. In addition to the Hon and Gruing's relationship components, Kim (2000) suggested that local (community) involvement, and reputation can measure the relationship between the organization and publics. Community involvement represents the linkage between the organization and the local community. Reputation involves the organization's invisible assets related to cognitive images. Hon, Grunig (1999) and Kim (2000) reported Cronbach's alphas for each dimension over .70. In addition to these relationship measures, the questionnaire asked about the use of the World Wide Web with respect to surfing hours, frequency visiting Websites, and the purpose of surfing.

RESULTS

One hundred ninety nine students out of 243 returned questionnaires for the experiment. The response rate was moderately high with 82 percent. Two responses were deleted due to high number of missing values, therefore 197 were used for the data analysis. All of the subjects are undergraduate students with a mean age of 21. Juniors accounted for the significant portion of all subjects with 40 percent followed by sophomores (29%) and seniors (27%). Seventy-six subjects were female whereas twenty-four percents were male. The average hours of surfing the World Wide Web was almost eight hours (M=7.92, SD=6.51) per week. Most of the students logged on to the Web for a variety of purposes such as information searches, e-mail checks, and entertainment.

Manipulation checks. The checks on the validity of manipulating the independent variable indicated that they were satisfactory in establishing the desired responses. In the interactivity manipulation, the subjects perceived the difference between high and low interactivity (high M=5.22, low M=4.54, t=-4.12, d.f.=195, p<.001). Even though low interactivity showed more than four (mid-point) out of the 7-point scale, the difference was statistically significant. In text/multimedia orientation, the subjects were asked to indicate the degree of media orientation, using the 7-point scale, anchoring 1 (text –oriented) to 7 (multi-media oriented). The subjects perceived the difference between two kinds of Web sites (multi-media oriented M=5.63, text-oriented M= 3.43, t=-13.16, d.f.=195, p<.001).

With respect to the reliability check for dependent measures, trust (.79), commitment (.75), satisfaction (.85), community involvement (.82), reputation (.73), exchange relationship (.77) all showed appropriate Cronbach's alphas. Control mutuality and communal relationship showed moderately low alphas (control mutuality =.55, communal relationship=.49). In the dimension of control mutuality, "In dealing with the people like me has a tendency to throw its weight around" created a low Cronbach's alpha. After deleting the item, the alpha (.77) was increased. In the dimension of communal relationship, "This organization is very concerned about the welfare of people like me" decreased the Cronbach's alpha. The alpha was increased to .80 after deleting this item.

The study used analysis of multivariate covariance (MANCOVA) with previous attitude as a covariate to analyze the effect of the interactivity and medium composition (text/multimedia orientation) on the relationship between the corporation and publics. The assumptions underlying the MANCOVA, a linear relationship between the dependent variable and the covariate, and the homogeneity of regression slopes for dependent variables were met. In addition, the correlation among the dependent measures was met to run the MANCOVA. First of all, the significance of the covariate variable was found. The result indicated that the previous attitude variable was meaningful, F (9.41, 8) = .70, p<.001.

Hypothesis 1 posited that high interactivity increases the favorable relationship between the organization and publics. The results indicated a significant interaction was detected between interactivity and medium composition in the overall model, F (8, 178) = 3.94, p<.001, Wilks's Lambda = .85.

Insert Table 1 About Here

Insert Figure 1 About Here

The results indicated that the relationship between the company and the subjects varied depending on the interaction of independent variables. To analyze the interaction effect, the study conducted univariate analyses. As shown in Figure 1, community involvement and reputation showed significant interaction effects, which influenced the overall interaction effect in the multivariate model.

In the reputation dimension, high interactivity affects reputation more strongly in multimedia than in text (multimedia M=5.59, text M=5.31), however low interactivity was more strongly affected in the text-oriented condition than in the multimedia-oriented condition (mutimedia M=5.19, text M=5.40), F= (1, 3.07) =5.25, p<.05. This implies that high interactivity is only effective when used together with multimedia. If interactivity is low, explaining more in texts can make up the lack of interactivity to some extent.

In the community involvement dimension, high interactivity was affected by medium composition. High interactivity showed lower perception of community involvement in the multimedia-oriented condition than in the text-oriented condition (multimedia-oriented M= 3.34 vs. text-oriented M=3.98), whereas low interactivity showed stronger perception of involvement in the multi-media condition than in the text-oriented condition (multimedia-oriented M=4.32 vs. text-oriented M=3.78), F (1, 15.46) = 12.74, p<.001. The results suggest that interactivity interact with media composition. The perception of community involvement can be increased in the case where interactivity is used properly with texts. The innovativeness of Websites with multimedia functions may block the real intention of interactivity with publics. Unexpectedly, both high interactivity and multi-media condition did not increase the subjects' perception for community involvement at the same time.

In the analysis of main effects, the results indicated that there is a significant multivariate main effect for interactivity, F (8, 178) = 2.67, p<.01, Wilks's Lambda = .89. Thus, hypothesis 1 was supported (See Table 2). Subsequently, to find out the individual effect on dependent variables, the study conducted univariate ANCOVA. Interactivity significantly affected the community involvement dimension, F (1, 8.65) =7.13, p<.01, and moderately affected the commitment dimension F (1, 2.39) =2.93, P <.089. Interactivity did not show any main effects on other dependent variables.

The multivariate main effect for medium composition did not show any significant effects on dependent relationship dimensions. Thus, hypothesis 2 was rejected (See Table 2).

Insert Table 2 About Here

Insert Table 3 About Here

Ad Hoc Analysis

Even though MANCOVA showed significant effects on the overall model (interaction and main on interactivity), some dependent variables did not show significant effects in univariate ANCOVA. Thus, ad hoc analysis was conducted to check dimensions of relationship variables.

As Table 4 shows, principal components of factor analysis using varimax rotation indicated that the items of the "trust" dimension shared much of its variance with other existing dimensions such as commitment and reputation. However, the extracted factors resulted in seven factors, which is similar to the earlier model (Hon & Grunig, 1999; Kim 2000). Thus the dimensionality of the organization-public relationship did not showcase a critical weakness in the study.

Insert Table 4 About Here

DISCUSSION

The purpose of this paper was to examine the relationship between Web characteristics and perceptions toward relational components. In other words, we examined the effect of relationship components depending on the varying Web characteristics. The MANCOVA showed that interactivity and multimedia orientation have significant effects on relationship building between the organization and publics. Univariate analyses revealed that some relationship variables have an interaction effect between interactivity and multimedia arrangement. Reputation was increased in the case of high interactivity and multimedia orientation. However, in the case of text orientation, high interactivity did not play a significant role for building reputation.

However, there was an unexpected outcome. In community involvement, the innovativeness of Websites with multimedia functions may block the real intention of interactivity with publics. Both high interactivity and multi-media orientation did not increase the subjects' perception for community involvement. Subjects felt more community involvement when interactivity met text orientation. This implies that using the Web from the perspective of relationship management does not mean updating technological gimmicks or showing off the innovativeness of the organization. These results suggest that relationship building stems from trust and cooperation in the long-term. Thus, real intention is more important than superficial appearance. This result leaves room for more future investigations.

In the analysis of main effects, the impact of interactivity on relationship building was verified overall. Thus hypothesis 1 was accepted. The results suggest that the unique feature of World Wide Web plays an important role in building relationships between an organization and publics. It appears that the enhancement of interactivity in a Web site would bring better relationships with publics. The significant impact of community involvement on relationship building especially needs to be noted in that the publics appear increasingly interested in the organizations' beneficial role in their community. In addition, the publics' commitments toward the corporations appear to be influenced moderately by the level of interactivity.

The two-way symmetrical public relations model emphasizes mutual understanding and collaboration between an organization and its public. One of the practical implications of this study was that public relations practitioners need to take into account audience-oriented Web content, which facilitates building a positive relationship with a variety of publics. For example, more rich interactive Web contents such as availability of feedback, e-mail, and easy connectivity with other content appear to be an increasingly important feature in the competitive Web environment between organizations. Although Johnson (1997) stated that the World Wide Web could facilitate media relations, employee communication, government relations and customer relations due to its interactive function, a number of content analysis studies indicate that most content materials on the World Wide Web are generally associated with marketing activities and promote favorable corporate images in publics' perception (Cross, 1994; Hill & White, 2000; Ho, 1997). In other words, public relations practitioners do not yet use the Internet to enhance interactions between organizations and their publics.

One caution involves the finding that most subjects perceived the interactivity moderately even in minimum level of interactivity if they were given the definition of interactivity. These findings suggest that most Websites tend to furnish moderate levels of interactive features. As a result, the lower mean of interactivity (M=4.54) in the experiment was higher than the mid-point.

In hypothesis two, we predicted that multimedia arrangement would enhance the subjects' perception on relationship building toward the corporations. In the analysis of main effects on medium composition, the results did not show any significant effects on relational components. Whether the Websites use multimedia or text was not a deciding factor for building favorable relationships with publics. Thus hypothesis 2 was rejected. However, these results echo the findings of previous research (Sundar, 2000). The increase of multimedia did not enhance the cognitive information processing in multiple media arrangements in terms of cognitive effectiveness. Sundar showed that the arrangement of text and picture was the most effective composition in his experiment. From the perspective of relationship building, the results suggest displaying state of the art technology does not enhance favorable attitudes as the organization might expect. But rather, the publics perceive and evaluate the organization with more fundamental criteria such as reputation, community involvement, commitment, and satisfaction experience. Although the new medium can enhance the relationship components positively, the findings suggest that simple reliance on the new medium does not guarantee good relationships between organizations and publics.

The factor analysis suggested that the earlier relationship measure (Grunig & Hon, 1999; Kim, 2000) was reasonably reliable. The deletion of the "trust" dimension stemmed from the common share of its variance with other relationship components such as reputation and satisfaction. Therefore, the seven factors were extracted similarly, validating earlier measures. However, in order to draw more precise relational dimensions, confirmatory factor analysis (CFA) rather than exploratory factor analysis (EFA) seems to be relevant to identify multidimensional relationship components, since CFA can control error variance in addition to explained variance. Future studies can replicate the relationship measures with a structural equation model (SEM).

There are several aspects of this study that may need further examination. First, we could not figure out the relative impact of interactivity components. There are a number of interactivity components ranging from feedback to connectivity in the World Wide Web content. Further study is warranted to investigate the relative impact of sub dimensional interactivity. Second, we were not able to totally control the subjects' whole exposure to certain kinds of stimuli, which might limit reliability of the study.

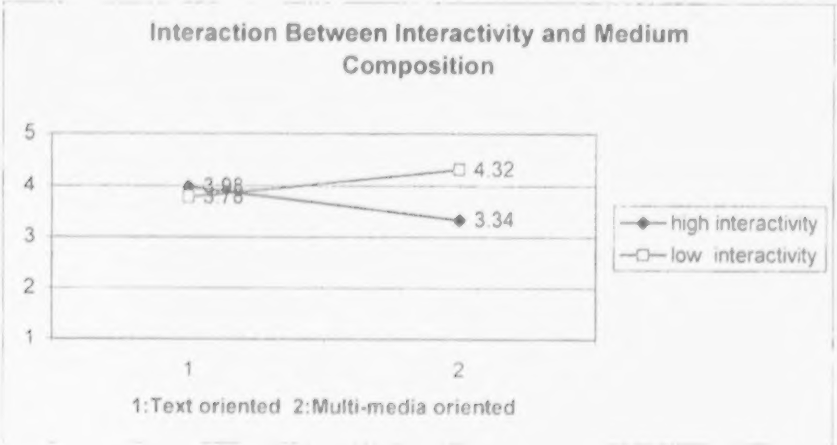
With respect to the interaction between the Internet and public relations, a number of studies await further exploration. The World Wide Web as an essentially computer-mediated-communication (CMC) guides a number of research avenues. Non-verbal communication, lack of reality feeling, and the anonymity of the public's access are unique features of CMC. Thus, the new task asking subjects how they use these characteristics when they are engaging in relationships with organizations should significantly extend the study of the Web and public relations.

Table 1. Mean and Standard Deviation of Dependent Variables

Dependent Variable	Interactivity	Media Composition	Mean	Std. Deviation
Trust	weak interactivity	text oriented	4.9610	.7600
		multi media oriented	5.2147	.7353
	strong interactivity	text oriented	5.1899	.7956
		multi media oriented	5.1389	.7247
Control Mutuality	weak interactivity	text oriented	4.5390	.8357
		multi media oriented	4.6410	.8107
	strong interactivity	text oriented	4.7054	.9765
		multi media oriented	4.5764	.9815
Commitment	weak interactivity	text oriented	4.3085	.9487
		multi media oriented	4.7260	.9603
	strong interactivity	text oriented	4.8663	.9626
		multi media oriented	4.8437	.9363
Satisfaction	weak interactivity	text oriented	4.6117	1.0907
		multi media oriented	5.0625	.8163
	strong interactivity	text oriented	5.0233	.9680
		multi media oriented	5.1406	.8826
Communal Relationships	weak interactivity	text oriented	2.8369	.8279
		multi media oriented	2.4872	.9485
	strong interactivity	text oriented	2.5659	1.1234
		multi media oriented	2.8750	1.1164
Community Involvement	weak interactivity	text oriented	3.7801	1.1553
		multi media oriented	4.3269	1.0108
	strong interactivity	text oriented	3.9845	1.0739
		multi media oriented	3.3403	1.1780
Reputation	weak interactivity	text oriented	5.4043	.7812
		multi media oriented	5.1923	.7270
	strong interactivity	text oriented	5.3198	.6577
		multi media oriented	5.5938	.8761
Exchange Relationships	weak interactivity	text oriented	4.2500	1.0108
		multi media oriented	3.9375	1.0686
	strong interactivity	text oriented	4.3140	.9065
		multi media oriented	4.2500	1.1906

Figure 1. Interaction Effect on Community Involvement and Reputation

a) Community Involvement



b) Reputation

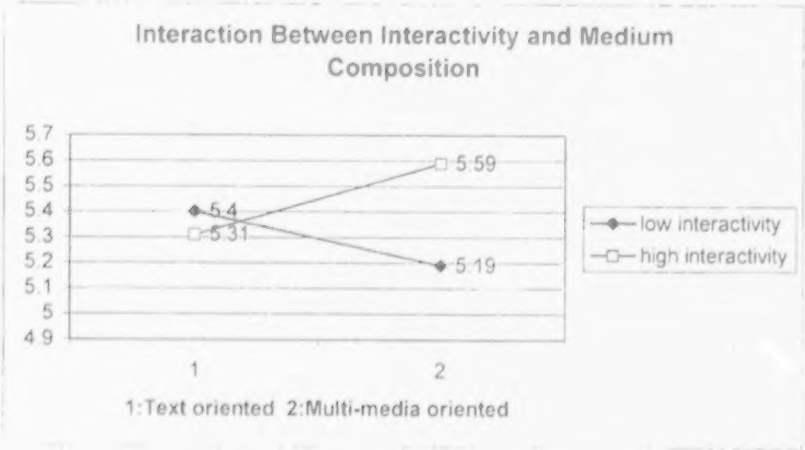


Table 2.

Multivariate Test of Independent Variables on

Independent Variable		Value	F	Hypothesis	Error	Sig
Intercept	Pillai's	.782	79.824	8.000	178.000	.00
	Wilks'	.218	79.824	8.000	178.000	.00
	Hotelling's	3.588	79.824	8.000	178.000	.00
Previous	Pillai's	.297	9.418	8.000	178.000	.00
	Wilks'	.703	9.418	8.000	178.000	.00
	Hotelling's	.423	9.418	8.000	178.000	.00
Interactivit	Pillai's	.107	2.668	8.000	178.000	.00
	Wilks'	.893	2.668	8.000	178.000	.00
	Hotelling's	.120	2.668	8.000	178.000	.00
Medium	Pillai's	.042	.964	8.000	178.000	.46
	Wilks'	.958	.964	8.000	178.000	.46
	Hotelling's	.043	.964	8.000	178.000	.46
Interactivity * Arrangeme	Pillai's	.151	3.943	8.000	178.000	.00
	Wilks'	.849	3.943	8.000	178.000	.00
	Hotelling's	.177	3.943	8.000	178.000	.00

*Covariate (previous attitude) is significant at the level of p<.001
*Interactivity is significant at the level of p<.001
*Interactivity * Medium Arrangement is significant at the level of p<.001

Table 3.

Analysis of Covariance for Interactivity and Medium Arrangement

Independent Variable	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Attitude (Covariance)	Trust	15.199	1	15.199	31.168	.000***
	Control Mutuality	1.495	1	1.495	1.850	.175
	Commitment	17.449	1	17.449	21.363	.000***
	Satisfaction	29.318	1	29.318	40.071	.000***
	Communal Relationships	20.956	1	20.956	23.071	.000***
	Community Involvement	2.745	1	2.745	2.263	.134
	Reputation	.993	1	.993	1.696	.194
	Exchange Relationships	.133	1	.133	.119	.730
Interactivity	Trust	.002	1	.002	.061	.804
	Controlled Mutuality	.001	1	.001	.020	.887
	Commitment	2.388	1	2.388	2.924	.089
	Satisfaction	.486	1	.486	.664	.416
	Communal Relationships	1.456	1	1.456	1.603	.207
	Community Involvement	8.648	1	8.648	7.129	.008**
	Reputation	.803	1	.803	1.371	.243
	Exchange Relationships	1.792	1	1.792	1.607	.207
Medium Arrangement	Trust	.179	1	.179	.366	.546
	Control Mutuality	.0032	1	.003	.039	.843
	Commitment	1.128	1	1.128	1.381	.241
	Satisfaction	2.464	1	2.464	3.368	.068
	Communal Relationships	.003	1	.003	.036	.850
	Community Involvement	.203	1	.203	.167	.683
	Reputation	.002	1	.002	.035	.852
	Exchange Relationships	1.602	1	1.602	1.437	.232
Interactivity x Medium Arrangement	Trust	.487	1	.487	.998	.319
	Control Mutuality	.466	1	.466	.577	.449
	Commitment	1.290	1	1.290	1.580	.210
	Satisfaction	.437	1	.437	.597	.441
	Communal Relationships	3.421	1	3.421	3.767	.054
	Community Involvement	15.457	1	15.457	12.742	.000***
	Reputation	3.071	1	3.071	5.248	.023*
	Exchange Relationships	.670	1	.670	.601	.439

* p<.05. ** p<.01. *** p<.001

Table 4. Factor Analysis for Relationship Dimensions

Rotated Component Matrix

Items	Satisfaction	Commitment	Reputation	Communal Relationships	Community Involvement	Exchange Relationships	Reputation
1	.413	.382	.180	.437	.0038	-.0023	.0081
2	.305	.606	-.0081	.264	.0059	.0039	.187
3	.490	.302	-.107	.232	.0044	.0025	.362
4	.226	.707	.126	.161	.0073	.0015	-.0059
5	.160	.0083	.320	.00045	-.00069	-.0034	.774
6	.237	.350	-.0057	.195	.191	.0062	.665
7	.339	.598	-.0071	.112	.252	.0068	.211
8	.112	.567	.226	.0084	.318	.0027	.136
9	.103	.813	.177	.118	.126	-.0035	-.0057
10	.237	.652	.265	.153	.133	.009	.291
11	.235	.552	.304	-.0012	-.0059	.0039	.369
12	.621	.294	.248	-.0079	.146	-.002	.114
13	.743	.228	-.0099	-.0017	.213	-.0094	-.0059
14	.778	-.0027	.0075	.229	.144	-.140	.159
15	.662	.238	.247	.139	-.00001	.0043	.0073
16	.669	.241	.297	.205	.0019	.112	.132
17	.657	.282	.350	.134	.119	-.0060	.137
18	-.006	-.213	-.0039	-.741	-.0069	.0092	-.0004
19	-.0078	-.130	-.0072	-.794	-.0084	.0047	-.116
20	-.227	-.0089	.0031	-.826	-.0064	.158	-.0028
21	.184	.184	.00063	.268	739	.0030	.162
22	.112	.103	.106	-.0058	.834	-.104	-.0065
23	.115	.176	.170	.101	.859	-.0002	.0032
24	.149	.276	.587	-.0053	.235	.0051	.107
25	.132	.127	.729	.0065	.293	.0068	-.0031
26	.0035	-.0055	.686	.0091	-.187	.176	.365
27	.242	.180	.661	.0044	.0044	.0065	-..0029
28	-0009	-.0067	-.0045	-.0007	-.0049	.827	-.0028
29	.0031	-.0026	-.0006	-.133	.0039	.867	-.0088
30	-.0021	.0089	.131	-.193	-.0083	.721	.0027
31	-.102	.131	.235	.0046	-.0053	.603	.169

*Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

* The figures are factor loadings

Numbered Items.

1. This organization treats people like me fairly and justly.
2. Whenever this organization makes an important decision, I know it will be concerned about people like me.
3. This organization can be relied on to keep its promises.
4. I believe that this organization takes the opinions of people like me into account when making decisions.
5. This organization has the ability to accomplish what it says it will do.
6. Sound principles seem to guide this organization's behavior.
7. This organization and management are attentive to what each other say.
8. This organization believes the opinions of people like me are legitimate.
9. This organization really listens to what people like me have to say.
10. I feel that this organization is trying to maintain a long-term commitment to people.
11. I can see that this organization wants to maintain a relationship with people.
12. There is a long-lasting bond that this organization and people.
13. Compared to other organizations, I value my relationship with this organization more.
14. I am happy with this organization.
15. Both the organization and people like me benefit from the relationship.
16. Most people like me are happy in their interactions with this organization.
17. Generally speaking, I am pleased with the relationship this organization has established with people like me.
18. Most people enjoy dealing with this organization.
19. I feel that this organization takes advantage of people who are vulnerable.
20. I think that the organization succeeds by stepping on other people.
21. The organization seems to be the kind of company that invests in the community.
22. I am aware that the organization is involved in my community.
23. I think that the organization is very dynamic in maintaining good relationship with the community.
24. The organization has the ability to attract, develop, and keep talented people.
25. The organization uses corporate visible and invisible assets very effectively.
26. The organization is financially sound enough to help others.
27. .The organization is innovative in its corporate culture.
28. Whenever this organization gives or offers something to people, it generally expects something in return.
29. Even though people had a relationship with this organization for a long time, it still expects something in return whenever it offers us a favor.
30. This organization will compromise with people like me it knows that it will gain something.
31. This organization takes care of people who are likely to reward the organization.

Appendix 1 : Dependent Variables

Relationship Measurement

Trust

1. This organization treats people like me fairly and justly.
2. Whenever this organization makes an important decision, I know it will be concerned about people like me.
3. This organization can be relied on to keep its promises.
4. I believe that this organization takes the opinions of people like me into account when making decisions.
5. This organization has the ability to accomplish what it says it will do.
6. Sound principles seem to guide this organization's behavior.

Control Mutuality

1.This organization and management are attentive to what each other say.
2.This organization believes the opinions of people like me are legitimate.
3.In dealing with people like me, this organization has a tendency to throw its weight around.
4. This organization really listens to what people like me have to say.
5.The management of this organization gives people like me enough say in the decision-making process.

Commitment

1.I feel that this organization is trying to maintain a long-term commitment to people.
2.I can see that this organization wants to maintain a relationship with people.
3.There is a long-lasting bond that this organization and people.
4.Compared to other organizations, I value my relationship with this organization more.
5.I would rather work together with this organization than not.

Satisfaction

1. I am happy with this organization.
2. Both the organization and people like me benefit from the relationship.
3.Most people like me are happy in their interactions with this organization.
4.Generally speaking, I am pleased with the relationship this organization has established with people like me.
5. Most people enjoy dealing with this organization.

Communal Relationships

1.The organization does not enjoy giving others.

2. The organization is very concerned about the welfare of people like me.
3. I feel that this organization takes advantage of people who are vulnerable.
4. I think that the organization succeeds by stepping on other people.

Exchange Relationships

1. Whenver this organization gives or offers something to people, it generally expects something in return.
2. Even though people had a relationship with this organization for a long time, it still expects something in return whenever it offers us a favor.
3. This organization will compromise with people like me it knows that it will gain something.
4. This organization takes care of employee who is likely to reward the organization.

Local or community involvement

1. The organization seems to be the kind of company that invests in the community.
2. I am aware that the organization is involved in my community.
3. I think that the organization is very dynamic in maintaining good relationship with the community.

Reputation

1. The organization has the ability to attract, develop, and keep talented people.
2. The organization uses corporate visible and invisible assets very effectively.
3. The organization is innovative in its corporate culture.
4. The organization is financially sound enough to help others.

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Media Coverage of Risk Events:

A Framing Comparison of Two Fatal Manufacturing Accidents

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Media Coverage of Risk Events:

A Framing Comparison of Two Fatal Manufacturing Accidents

Risk communication addresses how individuals, groups or organizations frame their pictures of the world by addressing scientific evaluations of risks, the perceptions lay people have of them, and actions that are warranted in light of the degree of risk and people's tolerance. A growing body of research has examined the risk communication process from some key stakeholder positions (government officials, industry, scientists and ordinary citizens), but additional research is essential to ascertain the message content that journalists use to frame and discuss risk. The media – both at the micro (journalist) and macro (medium) level – affect with varying degrees how individuals develop their pictures of the world (e.g., McCombs, Einsiedel, & Weaver, 1991).

All aspects – input, process and output – are integral parts of risk communication. The purpose of this paper, however, is to focus on and extend analysis of the meaning contained in discourse as part of a community infrastructural approach to risk communication studies, specifically related to how the print media frame issues strife with health, safety and environmental uncertainty. This exploration has substantial implications for public relations practitioners who may be called upon to design messages about risks and to communicate on behalf of companies, activist groups, ordinary citizens and governmental agencies.

Technological risk is one of the more hotly contested issues associated with living in a modern society, from privacy issues regarding reproductive processes to new sustainable energy sources. Recent media reports concerning record-setting global warming, unprecedented forest fires in Brazil and Indonesia, and a host of other fallouts from our technological advancements bombard our attention daily. Iconic incidents such as Bhopal and Mayak internationally, and Three Mile Island and Hanford nationally, will always remind people of the dangers involved with the production and use of hazardous materials.

Journalists and other communication practitioners who deal with risk communication should strive to achieve a delicate balance – to help people make sound judgments within a community of interest even though technical information is often difficult to obtain, assess and draw consensual conclusions about. On the other hand, however, those same people must not lose their sense of apprehension about risks to such an extent that they cannot or do not act to reduce their harm. "Risks to health, safety and the environment abound in the world and people cope as best as they can. But before action can be taken to control, reduce or eliminate these risks, decisions must be made about which risks are important and which risks can safely be ignored" (Covello & Johnson, 1987, p. vii).

Risk Communication

An essential element of human history is the drama of assessing, communicating about and adapting to risks. The origins of risk analysis have been traced to the Babylonians in 3200 B.C. They used myths, metaphors and rituals to predict risks and to communicate knowledge about avoiding hazards. Risk communication was embedded in folk discourse (Krimsky & Plough, 1988). Explicit interest in risk communication in the United States can be traced back to the 1950s and the "Atoms for Peace" campaign. The anti-nuclear movement in the 1970s put risk communication into the limelight (Kasperson & Stallen, 1991). Today, those drama messages have been replaced by information-based technologies and expert-centered messages.

If exposure to risk is not new, then why is there a renaissance in risk assessment and risk communication? According to Fischhoff (1990), "What is new in their [stakeholders and general public] response to the risk of modern technologies is their insistence on having a role in deciding how those risks will be managed" (p. 84). Individuals, activist groups and communities insist on being part of the decision process, whether it concerns hazardous materials or new pharmaceutical products. "A revolution in environmentalism and personal health is requiring that reasonable and responsible communication be employed to change personal and collective behaviors" (Heath & Nathan, 1991, p. 15).

Focus on risk communication within the chemical industry began, at least in the perception of key stakeholders, when private and public organizations failed to understand and exhibit appropriate levels of corporate responsibility, by failing to achieve proper control of risks associated with their activities. When publics perceive this legitimacy gap, they take actions to impose standards on the offending organization (Sethi, 1977). For example, the chemical catastrophe in Bhopal motivated some citizens to worry whether similar risks loomed near their homes or at their work locations. Questions of that sort led federal legislators to create the Emergency Planning and Community Right-To-Know Act of 1986, section three of The Superfund Amendments and Reauthorization Act of 1986 (SARA Title III). Legislators created SARA as a communication apparatus and strategic business planning process to empower people regarding risks.

By codifying environmental risk communication, SARA requires chemical companies to inform citizens regarding the kinds and quantities of chemicals that are manufactured, stored, transported and emitted in each community. Newman (1988), in reviewing the Right-to-Know provision for the Public Relations Society of America, concluded "the theory behind these toxic laws is that this information not only will help answer citizen questions about [chemical] releases, but also will assist them in pressuring government and industry to correct practices that threaten their health and environment" (p. 8).

Risk comprehension, however, is more than just understanding the actual risks involved, making a decision about such risks and communicating about them. It deals with both the actual risks and the perception people have of them. "We do not perceive risks, we perceive various features of decision problems and this, in turn, leads to feelings of risk" (Brehmer, 1987, p. 26).

Heath and Nathan (1991) reasoned that risk communication is not just a matter of sharing data and interpreting it to draw science-based conclusions about risks. More accurately, risk estimates and policies related to the control of risks are socio-political decisions. Risk communication has progressed beyond a source-oriented approach to a risk perception and a risk management approach. Typical of the theme that characterized the source-oriented era is Covello's (1992) view of risk communication "as the exchange of information among interested parties about the nature, magnitude, significance or control of a risk"

(p. 359). Leiss (1996) called this the technical risk assessment period when, for example, industrial spokespersons were advised to appease or assuage publics' apprehension by being credible and clear.

A second phase of risk communication featured a more interactive approach. The National Research Council (1989) described the process as the two-way exchange of information: "We see risk communication as the interactive process of exchange of information and opinion among individuals, groups and institutions" (p. 2). This definition suggests a movement from an asymmetrical approach of communication and decision-making toward what J. Grunig (1989) defined as two-way symmetrical communication.

Leiss (1996) identified a third, current phase of risk communication that features social relations. Typical of this era, Otway (1992) discussed the complexity of risk communication: "Risk communication requirements are a political response to popular demands.... The main product of risk communication is not information, but the quality of the social relationship it supports" (p. 227). This approach based on a shared, social relations-community infrastructural approach works to achieve a level of discourse that can treat both the content issues of the risk – technical assessment – and the quality of the relationships.

Palmlund (1992) argued against an authority-centered, linear communication approach. "I believe that a different vision of life is needed, one that emphasizes the role of social interaction, emotions and power in public life…. Societal evaluation of risk must be seen as a contest, where the participants offer competing views of reality. They compete to define what should be viewed as the benefits and the risks of prevailing production practices" (p. 199). Thus, risk controversy can be considered a drama enacted by many personae, each attempting to create and live a different view of reality.

The nineteenth-century German philosopher Georg W. F. Hegel identified a process called *dialectic*, or the principle of contradiction. According to Hegel (Solomon, 1983), development is marked by the clashing and merging of opposites. In journalism, dialectic concerns such as objective versus subjective reporting and hard versus soft news influence the communication process (Merrill, 1989). Dialectic controversies related to technology (ethical versus unethical, costs versus benefits) are a central topic of risk communication with far-impacting effects. According to Nelkin (1989), "The social movements organized to challenge science and technology are driven by a moral rhetoric of good and evil, of right and wrong. They are attracting constituents who fear the misuse of science by major social institutions, who see the need to reassess the social values, priorities and political relationships underlying scientific and technological processes, and who see themselves as preserving the moral values lost in the course of technological change. Thus controversies matter and must be taken seriously as an indication of public attitudes toward science" (p. 456).

Understanding such controversies has been one of the principles in the risk communication literature. It seems to be the central premise of the analysis and prescriptive advice offered by Covello, von Winterfeldt, and Slovic (1987). Their analysis focused on: (1) experts as sources, (2) messages as information about risks, (3) channels as media reporters and editors, and (4) receivers as individual citizens. They worried that messages suffer from a lack of scientific understanding, data, models, methods and technical analyses that are often unintelligible to laypersons.

Covello et. al. (1987) noted that source problems include a lack of trust and credibility, disagreements among experts, limited authority and resources for addressing risk problems, lack of data addressing the specific fears and concerns of individuals and communities and failure to disclose research limitations. They also focused their research on the "limited understanding of the interests, concerns, fears, values, priorities, and preferences of individual citizens and public groups; and use of bureaucratic, legalistic and technical language" (pp. 110). Channels are affected by "selective and biased media reporting that emphasizes drama, wrongdoing, disagreements, and conflict; premature disclosures of scientific information; and oversimplification and distortions of, as well as inaccuracies in, interpreting technical risk information" (p. 111).

To effectively gain insight into how journalists frame issues, risk and uncertainty related to risk should not be considered absolute concepts, but vary by individual perception in context. Palmlund (1992) contended that risk studies could lead to incorrect conclusions if researchers feel that risks can be explained exclusively by applying "quantitative estimates" that are "priced as commodities" (p. 189). He believed that a strategy is needed "that emphasizes the role of social interaction, emotions, and power in public life" (p. 199). Part of that strategy could be using framing analysis to improve understanding of media coverage of events within communities of risk.

Framing

Implicitly, framing plays a crucial role in public relations (Hallahan, 1999), and by extension risk communication. If the product of risk communication is not information but the quality of the social relationship it supports (Otway, 1992), understanding how the media frame risk is an important message element of the social relationship.

Framing theories are often presented as explanations for the influence of media coverage on issue developments related to risk communication. The media are attracted to uncertainty and the risk (conflicts) about an issue. Framing concepts related to risk communication, issues management and crisis management suggest that what is stated or omitted can define issues such as risk events for audiences (Bridges and Nelson, 1999). "Framing theorists suggest that the way an issue is presented – the frame – especially through the media, can affect public perceptions of the issue" (p. 100). According to Nelkin (1989), the media establish a framework of expectations regarding risks associated with various technologies (e.g., manufacturing of chemicals) by making risks visible, providing a context for evaluation, and shaping expectations about similar or related risks.

The concept of framing provides an avenue to describe the power of text. "Analysis of frames illuminates the precise way in which influence over a human consciousness is exerted by the transfer (or communication) of information from one location – such as speech, utterance, new report, or novel – to that consciousness" (Entman, 1993, p. 52).

Framing involves both selection and salience. According to Entman (1993), "To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation" (p. 52). He also suggested that media frames could define problems, diagnose causes, make ethical judgments and suggest solutions. Some of the earliest work in understanding the concept of framing related to how receivers process information is Goffman's (1974) description of frames as a "schemata of interpretation" through which people organize their thoughts and the discourse related to their thoughts, relayed in experience and information.

Frames can also be used to describe how the communicator builds a message. Entman (1993) described how text contains frames that are manifested in the presence or absence of key linguistic, syntactic, lexical and semantic elements that "provide thematically reinforcing clusters of facts or judgments" (p. 52). The use of sources can have a significant effect on how the media frame an issue. This can depend of many variables, including the journalist's trust in source, familiarity with source and the ability of the source to gain the attention of the reporter, all affecting the amount and type of coverage (Einsiedel & Thorne, 1999).

Gitlin (1980) described how frames allow journalists to develop their stories within the infrastructure and requirements of journalism. "They sometimes generate, sometimes amplify a field of legitimate discourse that shapes the public's 'definitions of its situations,' and they [journalists] work through selections and omissions, through emphases and tones, through all their forms of treatment" (p. 9). Media frames involve the context, content, topic, coverage and package of news events.

One of Gans (1979, as noted by Gitlin, 1980) theories of news typologies included event-centered news. In this same vein, Shoemaker, Chang and Brendlinger (1987) noted that media coverage of events relates to the actions and behaviors of the community and world on that particular day, while being more of an index of the unusual aspects of individuals or organizations.

Among studies on media framing, focus on health, safety and environmental risks related to manufacturing hazardous materials have not been well developed, though media coverage of risk is part of the journalistic culture to inform readers about high-consequence events. The Chernobyl disaster of 1986 and the discovery of the ozone hole in 1985 gained the media's attention. The practice of framing discordant news events is a dominant fact of contemporary journalism (McCombs, Einsiedel, & Weaver, 1991). Part of this comes from the common use of the story or narrative in the telling of an event. "Central to the genre of journalism is the story" (p. 35). Work by McCartney (1987) has demonstrated that basic plots and themes used throughout literature are present in news stories.

Frames have at least four locations in the communication process, including communicators, text, receivers and culture (Entman, 1993). This paper focused on frames within the textual element of the risk communication process. "The text contains frames, which are manifested by the presence or absence of certain key words, stock phrases, stereotypical images, source of information, and sentences that provide thematically reinforcing clusters of facts or judgments" (p. 52).

The language selected by journalists in describing events influences perceptions of those events. As Edelman (1988) argued, "It is language about political events, not the events in any other sense, that people experience; even developments that are close by take their meaning from the language that depicts them" (p. 104).

Within the textual element of the risk communication process, framing can take place at multiple structural levels. As a form of language use, media texts can display linguistic or grammatical structures, such as phonology; syntactic structures may underlie ideological positions, such as using passive voice or deleting parts of news discourse; and lexical choices, such as using "Vietnam War" to describe a plant-explosion scene (van Dijk, 1988).

Also important for public relations practitioners is interpreting media discourse at the semantic level. "Semantically, sentence meanings (propositions) are mutually dependent and connected and form coherent sequences. Besides the meaning of words and sentences, world knowledge in the form of models, frames and scripts represented in memory, is brought to bear by the reader to understand a piece of news discourse as a coherent whole" (van Dijk, 1988, p. 177).

Van Dijk (1988) reasoned that framing elements also include rhetorical dimensions, such as structures or organizational principles. A rhetorical perspective for the study and practice of public relations entails the analysis of words and other symbols. "Meaning defines the identities and prerogatives of organizations, people associated with them, and their relationships" (Heath, 1993, p. 142). Specifically, words have propositional value (Burke, 1966), and the selection of those terms affects how information is considered, accepted, acted upon or altered. These propositions, according to Heath (2001), compete "in ways that help to inform judgments and actions, clarify and order the evaluative (value) dimensions of thought and choice, and justify or deny the expedient wisdom of competing policies" (p. 32).

Narrative analysis helps illuminate the meaning of discourse, including its cultural foundations. People think, communicate and behave in accord with their narratives (Fisher, 1987). Drama is dialogic and disputational – protagonist against antagonist. When telling a story, narrators feature themes of good and evil. Plots are means by which actors live out or enact themes of good and evil. People's sense of self and security is enacted in drama, narrative terms. In a similar way, each news story is the enactment of stories (plots and themes) by characters in scenes. To better understand a community or public, one can deconstruct its narratives, including media narratives of risk events.

By deconstructing media narratives, framing ultimately can help public relations practitioners understand how key stakeholders navigate through the information environment by better understanding what sources of information and how narrative elements frame the risk. As

Einsiedel and Thorne (1999) noted, a significant source of information for the public is mass media, people can be influenced by its content, "but simply that, over time, the media can be an important – if not the only – source of information for various publics on many issues" (p. 52).

Hallahan (1999) suggested that one of framing's inherent strengths might lie in the concept's "emphasis on providing context within which information presented and processed allows framing to be applied across a broad spectrum of communication situations" (p. 209). This paper helps to extend the concept of media framing to the risk communication context. Examining the media frames regarding risk events can also supply important descriptions of the media's role in risk discourse related to one of Hallahan's (1999) seven models of framing – the framing of news.

Combining the perspectives of risk communication and framing, this research project analyzed the selection and salience of issues and character roles within two risk events by one community's major daily newspaper. The paper looked at the following research questions:

RQ1: How did a major daily newspaper frame the issues involved in the risk narrative?

RQ2: How did a major daily newspaper frame the characters involved in the risk narrative?

RQ3: Did a major daily newspaper frame each risk event differently?

Background

The Texas Gulf Coast, and Houston Ship Channel in particular, is an excellent location to analyze media coverage of the risks associated with the production, storage and transportation of chemicals. This region, often referred to as the "Chemical Coast," has the largest concentration of petrochemical plants in the world. Chemical facilities possess some characteristics of risks. Lindell and Earle (1983) found that high-risk chemical facilities were distinguished by elevated levels of perceived threat to workers, the public and future generations. Major governmental and non-profit associations advocate for, monitor and/or regulate the chemical industry within the Houston Ship Channel, such as the Environmental Protection Agency (EPA), the Chemical Manufacturers Association (CMA), the Occupational Safety and Health Administration (OSHA), the Texas Natural

Resource Conservation Commission (TNRCC) and the Galveston-Houston Association for Smog Prevention (GHASP).

Of particular interest to this study is the Phillips Petroleum chemical complex located in Pasadena, Texas (outside the city of Houston). Two major incidents during the past 11 years provided an opportunity to analyze how the one major daily newspaper -- the *Houston Chronicle* -- frames the risks associated with the manufacturing of petrochemicals. Phillips is an integrated petroleum company engaged in oil and gas exploration and production worldwide; refining, marketing and transportation operations primarily in the United States; chemicals and plastics manufacturing and sales around the globe; and technology development.

On October 23, 1989, an explosion at the Phillips petrochemical plant killed 23 workers, injured more than 130 personnel and caused physical damage in excess of $1 billion. The explosion, where approximately 1,150 workers operate on a 640-acre complex, was felt 25 miles away, caused fire and heavy black smoke, and showered debris for miles around (Warren, 1989).

Numerous ambulances and medical helicopters responded to the plant located on the Houston ship channel. Six miles of the channel as well as a section of nearby State Highway 225 were closed immediately after the explosion. The U.S. Coast Guard and some Houston-based fireboats evacuated more than 100 people from the facility and took them across the channel. No general evacuations were ordered but two nearby schools were evacuated (Warren, 1989).

Regarding environmental pollution related to the explosion, the Texas Air Control Board stated that they did not detect any initial indications of hazards to the public. The air board found routine background levels of pollutants in trace quantities, except for higher-than-normal readings of compounds known as paraffin hydrocarbons, which are expected in a release by the fiery decomposition of polyethylene. Critics charged, however, that monitoring began more than 12 hours after the initial explosion and failed to include compounds such as dioxins and furans.

suspected carcinogens that can be formed when chlorinated chemicals burn or other chemicals burn in the presence of chlorine (Dawson, 1989).

The blast occurred while workers were cleaning hardened plastic out of a polyethylene reactor loop, where chemicals are churned to make plastic. "This accident occurred because of management failures by Phillips and Fish," said McMillian, then deputy assistant secretary at OSHA (Pearson & Mintz, 1990, p. A1). There was no backup to the key valve, which was improperly opened and caused the gas leak and blast, despite Phillip's corporate practice that called for the backup.

At the conclusion of the investigation (April 19, 1990), OSHA issued 566 willful and nine serious violations with a combined total proposed penalty of $5.7 million. Willful violations are those committed with an intentional disregard of, or plain indifference to, the requirements of the Occupational Safety and Health Act and OSHA regulations. A serious violation is defined as one in which there is a substantial probability that death or serious physical harm could result, and the employer knew or should have known of the hazard. Both sides eventually settled for a $4 million fine. The proposed fine and settlement were the largest in OSHA's history (U. S. Department of Labor, 1991).

OSHA also issued 181 willful violations and 12 serious violations with a combined total proposed penalty of $729,600 to Fish Engineering and Construction, Inc., a maintenance contractor on the site. The two companies were cited for willful violations under general requirements to provide a safe workplace.

The second explosion occurred March 27, 2000, which left one employee dead and 69 workers injured at the plant. The employee killed had worked for Phillips for 19 years and survived the 1989 explosion. Injuries included burns, cuts from flying fragments of debris and wounds from falls. The explosion spurred area school officials to seal their buildings and keep children safe inside as a precaution against the possibility of toxic fumes. Pasadena school buses were used to help evacuate employees (Rendon, Bryant, Hopper & Antosh, 2000, p. A1).

A chemical reaction at the bottom of a storage tank involving the chemical butadiene gave off enough heat to overpressure the tank and cause the explosion. A chemical reaction resulted in a fire and damage to other nearby chemical tanks. The butadiene tank was out of service for cleaning and had no pressure or temperature gauges that could have alerted workers in the control room to the impending hazard. Also, while the vessel was not in use, butadiene continued to flow into the tank through a non-functioning valve that had not been properly locked out (U.S. Department of Labor, 2000). State and county officials didn't detect elevated levels of toxic gases in areas downwind of the fire, but noted that chemicals burned in the fire probably contained some of the same toxic components as diesel exhaust (Dawson, 2000).

OSHA proposed fining Phillips $2.5 million, resulting from allegations of 50 violations of safety standards. The primary violations were the failure to train workers properly in the hazards associated with the reaction of the butadiene chemical. "Unfortunately, this tragedy is not an isolated incident, but one in a series of incidents at this site," said U.S. Labor Secretary Herman. "Three workers lost their lives in explosions at this plant in less than a year's time, and 23 others were killed in a major explosion in 1989," (U.S. Department of Labor:00-277, 2000, p. 1).

Methodology

This paper examined media framing of these incidents – to describe what frames are used and what frames dominated news coverage. Lindenmann (1983) suggested that public relations practitioners could use content analysis based on research questions related to any number of attributes of coverage, such as the presence or absence of particular themes. Media framing research, however, utilizes but differs from content analysis because it moves beyond counting textual elements as equally salient and influential, and focuses on the most salient clusters of messages – the frames – and its relationship and influence on audience's schemata (Entman, 1993).

Second, this article provides some insight into how media frames change over time. Two major chemical explosions during the past 11 years at the same chemical complex provided an opportunity to analyze how one community's major daily newspaper framed the risks associated with the production of hazardous materials.

This research analyzed the content of all the news, feature, opinion and editorial articles in the *Houston Chronicle* related to two separate explosions at the Phillips Petroleum chemical complex in Pasadena, Texas. The *Houston Chronicle* was selected because it is now the only major daily newspaper in the area, and the only major daily in the area that was in operation during both explosions. The dominant local paper, albeit only one as opposed to including other major dailies or national papers, was selected due to the researcher's theoretical focus on a community, infrastructural approach to meaning in risk discourse. The time period analyzed was from October 23, 1989 (the day of the first explosion) until November 1, 2000. The second explosion occurred March 27, 2000, and still received considerable coverage through October 2000.

This study utilized the archival computer database of the *Houston Chronicle* to search for stories related to both explosions, including items related to the health, safety, environment, policy and resources affected by the explosions. Key terms used to search the database included "Phillips," "plant," "Pasadena," and "explosion." All possible combinations of the words were searched. The search rendered 165 articles related to the first explosion, and 47 articles related to the second explosion. Repetitive or similar articles (e.g., for different sections/editions of the newspaper) and articles under 50 words were eliminated for a more accurate representation of the explosion. Full texts of the articles were analyzed for the study. Sixty-nine (41.8%) articles covering the first explosion and 23 (48.9%) articles covering the second explosion were coded and analyzed. No sampling was required (n=92).

The coding unit was the individual article about the explosions. Each article was coded for five variables, with each variable including numerous categories. The five variables are: *news* *sources, risk narrative analysis features, associated risks, evaluation of the risks* and *contextual elements*.

News source related to the source of information and consisted of 16 categories: (1) *federal government*, such as the Occupational Health and Safety Administration; (2) *state and local government*, such as the Texas Natural Resource Conservation Commission or the local mayor's office; (3) *Phillips' management and spokespersons;* (4) *Phillips' contracted companies – management and spokespersons;* (5) *Phillips' employees, including contract;* (6) *Phillips' former employees;* (7) *Employees' families and friends (Phillips/contract);* (8) *industry*, such as near-neighbor chemical facilities or related associations such as the Chemical Manufacturers Association; (9) *unions*, such as the Paper, Allied-Industrial, Chemical and Energy International Union; (10) *medical*, such as doctors, emergency technicians or hospital spokespersons; (11) *attorneys – Phillips/contract companies*; (12) *attorneys – employees/families (Phillips and contract);* (13) *judges;* (14) *activist organizations*, such Texas Citizen Action; (15) *community leaders*, such as pastors or principles; and (16) *community residents*.

Limited to concern over characters in a sociopolitical drama, Palmlund's (1992) *risk narrative analysis* identified six risk character features related to risk discourse: (1) *Risk bearers* perceive themselves as or are actual victims of the negative consequences of the risk. (2) *Risk advocates* are the heroic protagonists who speak on behalf of the risk bearers. (3) *Risk generators* create the risks, or are thought to do so, and therefore are likely featured as antagonists in the risk narrative. (4) *Risk researchers* apply science to determine whether risks occur and if so how they can be abated or mitigated. (5) *Risk arbiters* are the characters in the risk narratives who take actions to save the risk bearers from present or future risks. (6) *Risk informers* are persons, such as reporters, news directors, critics, protestors and book authors – persons who stand outside of the conflict as such and make statements about it, who comment on the actions, risks, policies, and outcomes.

Associated risks related to the negative consequence of the risk (explosion) and consists of ten categories: (1) *personal health*, such as long-term physical and mental health consequences; (2) *personal safety*, such as injuries or deaths; (3) *environmental effects*, such as air, water or soil contamination; (4) *physical facility effects*, such as property destruction; (5) *physical community effects*, such as home, business, and community disruptions; (6) *economic community effects;* (7) *legal effects*, such as lawsuits; (8) *public policy effects*, such as regulatory penalties and other public policy consequences; (9) *ethical/moral effects*, such as corporate social responsibilities; and (10) *industry effects*, such as market fluctuation and disruption of raw materials for other facilities.

Evaluation of the risks related to the degree of seriousness of the risk. The five categories are: *major crisis, moderate crisis, minor crises* and *neutral coverage.*

Contextual elements related to the content elements of the articles. These include: *type of article* (news, feature, opinion, other), *headline, lead* and *main topic.*

To determine reliability, 10 articles were randomly chosen and coded by three graduate students, including the author. The author is familiar with the community and industry being examined, working for more than seven years in the area of risk communication along the Houston Ship Channel. All three graduate students have prior experience conducting qualitative research, including coding, for local government and private industry. The coding was conducted jointly – discrepancies were addressed and compromised. Following the development of the coding scheme, the coders independently coded a 10% random sample of the articles to determine inter-coder reliability (89.3%).

Results

RQ1: How did a major daily newspaper frame the issues involved in the risk narrative?

News sources can play a critical role on the impact of information processing (Entman, 1991). Fishman (1980) suggested that news sources play a large role in type of coverage and focus (definition) of risk. *Houston Chronicle* reporters utilized a wide variety of sources (n=16) to cover both explosions, but their choice of sources and frequency differed. During the 1989 explosion the reporters relied on the following grouped news sources (see table 1): Phillips/contracted companies (24.9%), employees and their families (22%), government (21.8%), industry (14%), community (13.2%) and medical (3.3%). During the 2000 explosion, the media used the following news sources: employees and their families (31.6%), legal (20.8%), Phillips/contracted companies (17.5%), government (12.6%), medical (8.5%), industry (6.3%) and community (2.6%).

Insert table 1 here

A detailed look at news sources (see table 2) revealed that during the1989 explosion, the *Houston Chronicle* relied on Phillips (22.5%), employees and their families (15.7%), federal government (11.2%), state and local government (10.6%), and industry (7.8%) as their sources. For the 2000 explosion, the five most frequently used news sources were employees and their families (21.9%), Phillips (17.1%), attorneys for employees and their families (10.8%), federal government (8.9%) and medical (8.5%).

Insert table 2 here

The *Houston Chronicle's* coverage (analyzed by article) of the 1989 explosion focused on five major associated risks: personal safety (46.4%), physical facility effects (11.6%), public policy effects (11.6%), physical community effects (8.7%) and personal health (7.2%). Headlines focused on personal safety (46.4%), physical facility effects (13%), public policy effects (13%), physical community effects (7.2%) and personal health (5.8%). Story leads focused on personal safety (46.4%), personal health (13%), physical facility effects (13%) and public policy effects (10.1%) (see table 3).

Insert table 3 here

Concerning evaluations of risks, an overwhelming majority of the 1989 articles depicted the event as a major crisis (84.1%), followed by a moderate crisis (8.7%), a minor crisis (4.3%) and a neutral event (2.9%). Headlines and leads followed a similar pattern, with an overwhelming majority of the headlines (81.2%) and leads (85.5%) describing the event as a major crisis (see table 4). Terms such as "inferno," "critical condition," "fatal explosion" and "something out of a Vietnam movie" were used to describe the severity of the event in the articles. Headlines such as "Explosion in Pasadena/Outside Phillips: Shock Wave Stuns Homes, Schools" (Kreps, Campbell, Warren, 1989, p. A15) were used to describe the explosion, while leads, for example, referred to "a massive fire, showering debris for miles around and inuring up to 100…" (Warren, 1989, p. A1).

Insert table 4 here

During the 2000 explosion, the articles focused on four major areas of associated risk: personal safety (34.8%), legal effects (30.4%), physical facility effects (13%) and public policy effects (8.7%). Headlines focused on personal safety (43.5%), legal effects (30.4%) and physical facility effects (13%). Leads focused on personal safety (39.1%), legal effects (26.1%), physical facility effects (13%) and personal health (8.7%) (see table 3).

Concerning evaluations of risks, an overwhelming majority of the 2000 articles (91.3%) depicted the event as a major crisis, with the remainder describing it as a moderate crisis (8.7%). Headlines and leads followed a slightly different pattern, with an overwhelming majority of the headlines also describing it as a major crisis (78.3%), followed by neutral (13%) and moderate (8.7%). Leads also focused on a major crisis (82.6%), followed by both neutral and moderate (8.7%) (see table 4). Terms such as "huge flames," "toxic fumes" and "damn dangerous plant" were used to describe the severity of the event. Headlines such as "Phillips Plant Blast Kills 1, Injures 52/Facility has an Infamous Safety Record" (Hanson & Kennett, 2000, p. A1) were used to describe the explosion, while leads, for example, referred to "an explosion and fire ripped through a section of Phillips…" (Rendon et al., 2000, p. A1).

RQ2: How did a major daily newspaper frame the characters involved in the risk narrative?

Using Palmlund's (1992) typologies of risk characters, the reporters emphasized six different risk character features. Though not absolute categories (some characters may switch roles during a crisis), risk bearers typically included Phillips/contract employees and their families, community residents, and former Phillips employees. Risk generators included Phillips and their contracted company. Risk arbiters included government, medical community and attorneys for the families. Risk bearers' advocates included unions and activist organizations. Risk informers included industry and near-neighbor facilities, while risk researchers come from a variety of sources, including community leaders and local professors.

For the 1989 explosion, risk bearers were featured the most (49.3%), followed by risk generators (24.6%), risk arbiters (18.8%) and risk researchers (4.3%). For the 2000 explosion, risk bearers were also featured the most (39.1%), followed by risk arbiters (30.4%), risk generators (26.1%) and risk researchers (4.3%) (see table 5).

Risk character features in headlines and leads were also examined. Headlines regarding 1989 explosion focused on risk bearers (50.7%), risk generators (23.2%), risk arbiters (16.0%) and risk researchers (7.2%), while leads focused on risk bearers (49.3%), risk generators (23.2%), risk arbiters (17.4%) and risk researchers (7.2%). For the 2000 explosion, headlines focused on risk bearers (34.8%), and risk generators and risk arbiters equally (30.4%). Risk bearers were also highlighted the most in leads (39.1%), followed by risk arbiters (30.4%), risk generators (21.7%) and risk researchers (8.7%) (see table 5).

Insert table 5 here

News sources by risk character features provided another measuring tool to examine how the media frame key stakeholders in risk events. Reporters used all six risk character features as sources during both the 1989 and 2000 explosion: 1989 – risk bearer (28.6%), risk arbiters (25.6%), risk generators (24.9%), risk advocates (13.5%), risk researchers (4.5%) and risk informers (2.8%); and 2000 – risk arbiters (33.8%), risk bearer (31.6%), risk generators (17.5%), risk researchers (9.7%), risk advocates (5.9%) and risk informers (1.5%) (see table 6).

Insert table 6 here

RQ3: Did a major daily newspaper frame differently each risk event?

Comparisons of the two explosions demonstrated some differences in the selection and salience of sources, issues and characters. Concerning grouped news sources, between 1989 and 2000 the use of legal sources (+1980%) and medical sources (+158%) increased dramatically. Other changes include an increase in the use of employees and their families as sources (44%). At the same time, there was a decrease in the use of community sources (-80%), industry (-55%), government (-42%) and Phillips/contract companies (-30%) (see table 1).

Regarding specific news sources (see table 2), there was a noticeable increase in the use of legal sources representing employees and their families (+980%), legal sources representing Phillips and their contract companies (+720%), medical (+158%), employees (+39%) and employees' families (+32%). There was a marked decrease in the use of community residents (-100%), industry (-81%), state and local government (-65%), community leaders (-48%), unions (-23%), Phillips (-21%) and federal government (-20%).

Concerning news sources identified by risk character features (see table 6), there was an increase in the use of risk researchers (+116%), risk arbiters (+32%) and risk bearers (+10%), while a decrease in the use of risk advocates (-56%), risk informers (-46%) and risk generators (-30%). Comparison of articles, headlines and leads by risk character features (see table 4) yielded some

variations. Articles focused on risk arbiters increased 62 percent, while articles focused on risk bearers decreased 21 percent. Headlines focused more on risk generators (+31%) while decreasing focus on risk bearers (-31%). Leads reduced focus on risk bearers (-21%) and risk generators (-6%).

Comparison of articles, headlines and leads by associated risks (see table 3) showed several differences. Articles focused on personal health (-40%) and personal safety (-25%) decreased, while headlines focused on personal safety (-6%) and leads focused on personal safety (-16%) also decreased. Regarding evaluations of risks, more articles described the 2000 explosion as a major crisis (+9%) as opposed to the 1989 explosion. Comparing headlines, there was a four percent reduction in describing the 2000 explosion as a major crisis, while leads showed a similar (-3%) reduction (see table 3).

Discussion

The *Houston Chronicle* uniquely framed each risk event, with some considerable differences in the selection and salience of issues and characters. Regarding news sources, those relied on by the media during these risk events can either be good news or bad news for practitioners, depending on perspective. For practitioners working for organizations that create risks, for example, sources from Phillips, contracted companies, industry and their attorneys were utilized slightly more (one in three) during the 1989 explosion than in the 2000 explosion (three out of ten). At the same time, community sources (e.g., activists or community leaders) were used 13 percent of the time during 1989 and less than three percent of the time during 2000. Employees and their families (risk bearers) also appear to be an important choice as news sources, utilized 22 percent during 1989 and 32 percent during 2000.

The *Houston Chronicle* clearly framed the issue as a major, personal safety crisis. During 1989, personal safety was the focus in articles, headlines and leads (46.4% for all three categories). Similar results for the 2000 explosion, with articles (34.8), headlines (43.5%) and leads (39.1%) focused on personal safety. Only legal effects related to explosion rated nearly as important during the 2000 explosion in articles (30.4%), headlines (30.4%) and leads (26.1%). The focus of risk events on legal concerns might have considerable affect on key risk process variables such as uncertainty, control, support/opposition, and relationship dynamics within risk discourse. Prior research has demonstrated that different types of spokespersons with varying levels of credibility, such as plant managers, local safety officers or third-party chemical experts, affect how lay person's perceive risks (e.g., Heath & Palenchar, 2000)

The language of the articles, headlines and leads all demonstrated a major crisis in more than 80 percent of their respective categories. It is interesting to note that 13 percent of the headlines and almost nine percent of the story leads covering the 2000 explosion indicated a neutral risk event, once again demonstrating Heath (1993) and Otway's (1992), among others, argument that risk communication is about perception, values and relationships more than about information and science as a product of discourse.

Overall, the newspaper coverage of the 1989 explosion primarily relied on Phillips/ contracted companies (24.9%), employees and their families (22%), and government (21.8%) for sources, which is consistent with the extended analysis that risk bearers (28.6%), risk arbiters (25.6%) and risk generators (24.9%) were the primary news sources. Articles, headlines and leads clearly focused on risk bearers facing a major crisis related to personal safety.

Overall, the 2000 explosion primarily used employees and the families (31.6%) and legal sources (20.8%) for sources, which is consistent with the extended analysis that risk arbiters (33.8%) and risk bearers (31.6%) were the primary news sources. Articles, headlines and leads focused on risk bearers facing a major crisis related to personal safety. This time however, headlines tended to focus nearly as much on risk generators (30.4%) as risk bearers (34.8%), and associated risks related to legal issues became an important topic covered by the media in articles (30.4%), headlines (30.4%) and leads (26.1%).

The data provided interesting insights related to non-personal safety issues. Despite the presence of risks related to chemical explosions, neither personal health effects (1989-7.2%; 2000-4.3%) nor environmental effects (1989-2.9%; 2000-0%) were major issues covered in either event. Other issues that received minor coverage included physical community effects (2000-4.3%), economic community effects (1989, 2000-4.3%), ethical moral effects (1989, 2000 <2%), and industry effects (1989, 2000 <2%). It appears that the *Houston Chronicle's* coverage of the event focused on the crisis at hand, related to personal safety, while providing little coverage of serious environmental and long-term personal health issues, and other secondary effects.

The second research question asked how the community newspaper framed risk characters involved in these events. During both the 1989 and the 2000 explosions, risk bearers received almost half of the attention in articles (1989-49.3%; 2000-39.1%), headlines (1989-50.7%; 2000-34.8%) and leads (1989-50.7%; 2000-34.8%). Risk generators also were highly featured, ranging from 30 percent of 2000 headlines to 22 percent of 2000 leads. As one might expect, the central characters in the risk event, bearers and generators, received the most attention.

It is important to note, however, the lack of attention focused on risk advocates, risk researchers and risk informers following both explosions. Risk advocates, such as activist groups, were emphasized in less than two percent of articles, leads and headlines during both explosions. This, despite the large presence of sophisticated local, state and national activist groups and other concerned organizations in the community. Risk informers were used as sources less than three percent of the time during both explosions, while less than two percent of the articles, headlines and leads during the 1989 explosion focused on this character, while during the 2000 explosion, they were not a focus of any article. Concerning effective risk communication strategies, this contradicts recent research by Heath and Palenchar (2000) that demonstrated that risk informers are preferred sources by residents in a community of risk.

Concerning sources, there was a marked trend in the use of legal (+1980%), medical (+158%) and employees and their families (+44%) as sources of information, while community (-80%), industry (-55%) and Phillips/contract companies (-30%) decreased. Combine this data with marked differences among the increased use of risk researchers (+116%), risk arbiters (+32%) and risk bearers (+10%) as sources, and the decrease in sources from risk advocates (-56%), risk informers (-46%) and risk generators (-30%), and it paints a convoluted picture. Medical and legal sources increased, even though there were dramatically fewer deaths, injuries, penalties and allegations of wrongdoing during the later explosion. Possible explanations could include a possible increased importance of the medical and legal community in risk cultures (demonstrated by an increased use of them as sources by the newspaper). Another explanation could be that the 2000 explosion was the fourth incident in the past 12 months at that plant. A K-Resin section of the plant exploded and killed two workers and injured four others in June 1999. In April 1999, a rail car containing polypropylene blew up, and in August 1999 there was an explosion in the polypropylene section of the plant. This analysis is consistent with Coombs (2000) recent work demonstrating that relationship history (in this case a facility that has a history of problems) in large part affects perception of organizational reputation and crisis responsibility to a lesser degree.

Concern regarding the increased use of legal sources during a crisis is also important. During the 1989 explosion, legal sources were used less than two percent, while during the 2000 explosion attorneys were used as sources 19 percent of the time. Specifically, the *Houston Chronicle's* use of attorneys on both sides of the debate was similar (legal sources representing risk generators, 1989-<1%, 2000-8.2%; legal sources representing employees and their families, 1989-<1%, 2000-10.8%). These findings provide additional insight regarding whether public relations is holding its own against the legal field encroachment, specifically as spokespersons, during a crisis. It also supports the viewpoint that public relations practitioners should and must learn to work with legal departments during a crisis (Fitzpatrick, 1993).

Clearly, however, there is an increased use of risk bearers and a decreased use in risk generators as sources. At the same time, the focus on risk bearers in articles (-20.7%), headlines (-31.4%) and leads (-20.7%) decreased, while focus on risk generators in articles (+6.1%) and headlines (+31%) increased. This information may be disconcerting to practitioners who represent organizations such as chemical companies. Not only is the focus on them increasing but also the reliance on them as sources of information is decreasing. Overall, the framing analysis represented a murky picture and several major inconsistencies, not unlike the uncertainty, perceptions and values that surround risk communication.

Conclusion

Tuchman (1978) argued more than 20 years ago that the mass media actively set the frames that media users employ to analyze, interpret and discuss public events (e.g., chemical explosions). As such, public relations practitioners need to focus on understanding how the media frame issues and their affect on an organization's key stakeholders. One limitation to this study is that the findings of a single newspaper are not generalizable to the media.

Hallahan (1999) rightfully argued that public relations practitioners fundamentally operate as "framing strategists, who strive to determine how situations, attributes, choices, actions, issues and responsibility should be posed to achieve favorable outcomes for clients" (p. 224). To operate as framing strategists, it is also crucial to understand how the key media outlets frame issues or events related to strategic goals and objectives of the organization. Though, as this paper notes, some work has been accomplished in this area, how these messages relate to public relations and specifically risk communication, needs to be further explored. The implication of such analysis, however, is that wise public relations personnel should understand how journalists work with "characters and plots" to increase the community fit leading to the development of mutually beneficial relationships.

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Table 1: News Sources by Grouped Categories

	1989 frequency (n=706)	**1989 percentage**	**2000 frequency (n=269)**	**2000 percentage**	**Percentage change**
Government (local, state, federal)	154	21.8%	34	12.6%	-42.2%
Phillips/contract companies	176	24.9%	47	17.5%	-29.7%
Employees and families (Phillips/contract, former)	155	22.0%	85	31.6%	+43.6%
Legal	6	< 1%	56	20.8%	+1980%
Medical	23	3.3%	23	8.5%	+157.6%
Industry (associations, unions, near-neighbor facilities)	99	14.0%	17	6.3%	-55.0%
Community (activists, community leaders, residents)	93	13.2%	7	2.6%	-80.3%

slight discrepancies in the totals of the percentage columns are due to rounding error.

Table 2: Specific News Sources

	1989 frequency (n=706)	1989 percentage	2000 frequency (n=269)	2000 percentage	Percentage change
Federal government	79	11.2%	24	8.9%	-20.5%
State and local government	75	10.6%	10	3.7%	-65.1%
Phillips' management and spokespersons	159	22.5%	46	17.1%	-21.3%
Phillips' contracted companies – management and spokespersons*	17	2.4%	1	< 1%	
Phillips' employees, including contract	111	15.7%	59	21.9%	+39.5%
Phillips' former employees	2	< 1%	5	1.9%	
Employees' families (Phillips/contract)	42	5.9%	21	7.8%	+32.2%
Industry	55	7.8%	4	1.5%	-80.8%
Unions	44	6.2%	13	4.8%	-22.6%
Medical	23	3.3%	23	8.5%	+157.6%
Attorneys – Phillips/contract companies	2	< 1%	22	8.2%	+720%
Attorneys – employees/families (Phillips/contract)	3	< 1%	29	10.8%	+980%
Judges*	1	< 1%	5	1.9%	
Activist organizations*	11	1.6%	0	0%	
Community leaders	35	5.0%	7	2.6%	-48.0%
Community residents	47	6.6%	0	0%	-100%

slight discrepancies in the totals of the percentage columns are due to rounding error.
*percentages not disclosed due to small number of cases (n<20)

Table 3: Comparison of Articles, Headlines and Leads by Associated Risks

	1989 frequency (n=69)	1989 percentage	2000 frequency (n=23)	2000 frequency	Percentage change
Articles					
Personal health	5	7.2%	1	4.3%	-40.3%
Personal safety	32	46.4%	8	34.8%	-25.0%
Environmental effects*	2	2.9%	0	0%	
Physical facility effects*	8	11.6%	3	13.0%	
Physical community effects*	6	8.7%	1	4.3%	
Economic community effects*	3	4.3%	1	4.3%	
Legal effects*	3	4.3%	7	30.4%	
Public policy effects*	8	11.6%	2	8.7%	
Ethical/moral effects*	1	1.4%	0	0%	
Industry effects*	1	1.4%	0	0%	
Headlines					
Personal health*	4	5.8%	1	4.3%	
Personal safety	32	46.4%	10	43.5%	-6.2%
Environmental effects*	2	2.9%	0	0.0%	
Physical facility effects*	9	13.0%	3	13.0%	
Physical community effects*	5	7.2%	1	4.3%	
Economic community effects*	3	4.3%	0	0.0%	
Legal effects*	3	4.3%	7	30.4%	
Public policy effects*	9	13.0%	1	4.3%	
Ethical/moral effects*	1	1.4%	0	0.0%	
Industry effects*	1	1.4%	0	0.0%	
Leads					
Personal health*	9	13.0%	2	8.7%	
Personal safety	32	46.4%	9	39.1%	-15.7%
Environmental effects*	2	2.9%	0	0.0%	
Physical facility effects*	9	13.0%	3	13.0%	
Physical community effects*	3	4.3%	1	4.3%	
Economic community effects*	3	4.3%	1	4.3%	
Legal effects*	3	4.3%	6	26.1%	
Public policy effects*	7	10.1%	1	4.3%	
Ethical/moral effects*	0	0.0%	0	0.0%	
Industry effects*	1	1.4%	0	0.0%	

slight discrepancies in the totals of the percentage columns are due to rounding error.

*percentages not disclosed due to small number of cases (n<20)

Table 4: Comparison of Articles, Headlines and Leads by Evaluations of Risks

	1989 frequency (n=69)	1989 percentage	2000 frequency (n=23)	2000 frequency	Percentage Change
Articles					
Major crisis	58	84.1%	21	91.3%	+8.6%
Moderate crisis*	6	8.7%	2	8.7%	
Minor crisis*	3	4.3%	0	0.0%	
Neutral*	2	2.9%	0	0.0%	
Headlines					
Major crisis	56	81.2%	18	78.3%	-3.6%
Moderate crisis*	8	11.6%	2	8.7%	
Minor crisis*	3	4.3%	0	0.0%	
Neutral*	2	2.9%	3	13.0%	
Leads					
Major crisis	59	85.5%	19	82.6%	-3.3%
Moderate crisis*	6	8.7%	2	8.7%	
Minor crisis*	3	4.3%	0	0.0%	
Neutral*	1	1.4%	2	8.7%	

slight discrepancies in the totals of the percentage columns are due to rounding error.

*percentages not disclosed due to small number of cases (n<20)

Table 5: Comparison of Articles, Headlines and Leads by Risk Character Features

	1989 frequency (n=69)	1989 percentage	2000 frequency (n=23)	2000 frequency	Percentage change
Articles					
Risk bearer	34	49.3%	9	39.1%	-20.7%
Risk advocates*	1	1.4%	0	0.0%	
Risk generators	17	24.6%	6	26.1%	+6.1%
Risk researchers*	3	4.3%	1	4.3%	
Risk arbiters	13	18.8%	7	30.4%	+61.7%
Risk informers*	1	1.4%	0	0.0%	
Headlines					
Risk bearer	35	50.7%	8	34.8%	-31.4%
Risk advocates*	1	1.4%	0	0.0%	
Risk generators	16	23.2%	7	30.4%	+31.0%
Risk researchers*	5	7.2%	1	4.3%	
Risk arbiters*	11	16.0%	7	30.4%	
Risk informers*	1	1.4%	0	0.0%	
Leads					
Risk bearer	34	49.3%	9	39.1%	-20.7%
Risk advocates*	1	1.4%	0	0.0%	
Risk generators	16	23.2%	5	21.7%	-6.5%
Risk researchers*	5	7.2%	2	8.7%	
Risk arbiters*	12	17.4%	7	30.4%	
Risk informers*	1	1.4%	0	0.0%	

slight discrepancies in the totals of the percentage columns are due to rounding error.
*percentages not disclosed due to small number of cases (n<20)

Table 6: News Sources by Risk Character Features

	1989 frequency (n=706)	**1989 percentage**	**2000 frequency (n=269)**	**2000 percentage**	**Percentage change**
Risk bearer	202	28.6%	85	31.6%	+10.5%
Risk advocates	95	13.5%	16	5.9%	-56.3%
Risk generators	176	24.9%	47	17.5%	-29.7%
Risk researchers	32	4.5%	26	9.7%	+115.6%
Risk arbiters	181	25.6%	91	33.8%	+32.0%
Risk informers	20	2.8%	4	1.5%	-46.4%

slight discrepancies in the totals of the percentage columns are due to rounding error.

PR

Running head: PUBLIC RELATIONS WORLDVIEW AND CONFLICT LEVELS

Public Relations Worldview and Conflict Levels in the Client-Agency Relationship

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Public Relations Worldview and Conflict Levels in the Client-Agency Relationship

Abstract

This study examines to what extent different worldviews of public relations are related to the agency-client relationship. A survey was conducted of eight public relations agencies and their clients in Korea, obtaining worldview measures and tension levels of 15 agency-client pairs. The findings show that overall, as the gap between the agency and client's public relations worldviews widens, more conflict occurs between them. The findings also demonstrate that a considerable gap exists between the agencies and clients in Korea in terms of their worldviews of public relations and that agencies have more symmetrical worldviews than do clients.

Public Relations Worldview and Conflict Level in Client-agency Relationship

The client-agency relationship is often likened to a marriage (Dimingo, 1987; Ritchie & Spector, 1990). Whether it will become an enduring, happy marriage or a short, quarrelsome one seems to be anybody's guess. The ideal client-agency relationship, like most marriages, requires constant nurturing by both partners; mutual respect, open and constant communication and integrity play an important part in the courtship phase and beyond (Ritchie & Spector, 1990).

Although it is often said that the agency and client are on the same team, the client's representative can subtly, but in a very real way, damage the agency's ability to succeed by acting as if he or she knows as much about the public relations business as the agency does (Dimingo, 1987). Conversely, the agency, with high turnover, may put junior staff on the account, providing poor service.

Agency-client complications have existed since the beginning of public relations history. In fact, there is a record of disagreement between Harvard University and the nation's first public relations agency, The Publicity Bureau, which dates back to the early 1900s (Cutlip, 1966, 1971). The *Public Relations Journal* has published 63 articles on the client-agency relationship for the 10-year period from 1980 to 1989, of which 26 were related to conflict issues (Bourland, 1993). Few attempts have been made, however, to delve deeply into the client-agency conflict issues despite their importance to successful public relations programs (Bourland, 1993; Dimingo, 1987), and of the attempts, most have been based in the United States.

This study began with an observation of specific phenomena in public relations within Korea. The public relations consulting business was first introduced to Korea in the mid-1980s. The first public relations firms in Korea have grown their businesses mainly with multinational client portfolios. They had two reasons for relying on multinational companies as their major client base. First, the entry of multinational companies into the Korean market has accelerated since the late 1980s, and these new market entrants, like any foreign company new to an unfamiliar market, sought local expertise (J. Grunig, L. Grunig, Sriramesh, Huang, & Lyra, 1995; Jang, 1997). Second, as Y. Kim (1998) suggested, Korean companies have traditionally kept in-house communications departments that were very strong in media relations, and saw no additional value in switching to an outside firm from their already effective and convenient in-house corporate communications team.

The Asian economic crisis that hit Korea in late 1997, however, revolutionized both the business and social sectors of the country (W. Kim, 1998). It tested beliefs and attitudes that Koreans had long treasured (Bremner & Moon, 1998; W. Kim, 1998; Kraar, 1998; Shim & Cho, 2000) and led some Korean corporations and government agencies to use public relations agencies. Interestingly, a pattern of tension between the agencies and local clients, including short-lived relations and frequent arguments, has been observed since; this contrasts with the relationship between the agencies and their multinational clients.[1] Why does more conflict seemingly occur with local clients than multinational ones, when there are likely more obvious cultural and language barriers between the agencies and the latter? Are there any particular factors operating that are stronger than these obvious cultural barriers?

This study examines the tension between the agencies and local clients in Korea that occurs in part due to a fundamental gap in their worldview of public relations. Worldview is a conceptual framework through which people see and interpret the world (J. Grunig & White, 1992). Therefore, as J. Grunig (1989) argues, to understand where the public relations domain is and where it is going in a particular cultural setting such as in Korea, we must examine the public relations worldview of Korean organizations carefully.

Learning how public relations is practiced in countries other than the United States is important because although public relations grew primarily in the United States through much of the 20th century, in recent years, it is now practiced globally (Wouters, 1991). As Culbertson (1996) suggests, public relations as practiced may differ from country to country. However, only recently have the broad outlines of such differences begun taking shape in scholarly writing. Thus, an effort to learn more of Korean public relations is likely to further help understanding of global public relations.

Research has been conducted to describe the practice of public relations, especially with a focus on to what extent the public relations four models (J. Grunig & Hunt, 1984) are applied in international settings. However, most of the research has been conducted in Anglo cultures with only a few exceptions (Culbertson & Chen, 1996; J. Grunig et al., 1995; Y. Kim, 1998). Therefore, continued research in broad international settings such as in Korea is meaningful in that it contributes to the knowledge base of public relations in general.

Public relations often follows multinational organizations as they enter new markets, thus more and more countries are adopting American or European public relations principles (Wakefield, 1996). Although public relations may have been already practiced in those markets, their public relations behaviors, such as sending gifts or money to journalists, do not likely fit American or European public relations (Y. Kim, 1998).

Some multinationals localize programs to meet local needs (Botan, 1992). However, many transfer their own philosophies into new territories to conduct public relations in their traditional ways (Wakefield, 1996). This means Korean public relations firms needed to adopt a similar standard to the multinationals to survive in business, given their reliance on multinationals for business growth. Conversely, traditional Korean organizations did not need to change their public relations practice within Korea except when they entered more developed markets. With this background, the conflict between the agencies and local clients is not surprising.

Therefore, the following is provided as a general research question for the study.

RQ: To what extent are different worldviews of public relations related to the agency-client relationship?

Conflict in Client-agency Relations

Bourland (1993) lamented that despite the importance of the agency-client relationship to successful public relations campaigns, researchers have paid little attention to exploring the sources or nature of conflict between practitioners and their clients. The concept of conflict has been defined as "an expressed struggle between at least two interdependent parties who perceive incompatible goals" (Hocker & Wilmot, 1991, p. 12), which "results in negative emotional states and behaviors intended to overcome the opposition" (Katz & Lawyer, 1993, p. 7). Although some argue that conflict can be productive (Bourland, 1993; Hocker & Wilmot, 1991) and is a natural, functional occurrence in more complex, interpersonal relationships (Wehr, 1979), conflict in business-to-business situations can easily lead to the end of the relationship.

Bourland (1993) found that 26 out of 63 articles relating to client-agency relations that appeared in *Public Relations Journal* featured conflict issues. Overall, the highest ranking client concerns were related to brain power of the agency. Clients complained that the agency did not have sufficient knowledge and understanding of the client's business, partially due to lack of research. In contrast, complaints from agencies were spread relatively evenly over various items, such as "client does not share information," "client lacks in knowledge of public relations," "client does not give me enough time," "client does not trust agency," and "client does not pay" (pp. 391-394).

Trade journals provide valuable insight into why some client-agency relations do not work. Basically, clients do not have a clear idea of what a public relations firm does, or what it is supposed to do (Doll, 1991; Southard, 1991). Clients with unsophisticated views of public relations think only of media coverage (Levy, 1990) or, at the other extreme, "hold too exalted a view of public relations" (Doll, 1991, p. 23). In addition, interpersonal difference (Michell, 1986), lack of clear-cut objectives and indecisiveness on the client's part, lack of information flow from client to agency, too many approval levels, the personnel turnover rate at the agency, and disagreement over the agency's role have been suggested as causes for conflict (Hotz, Ryans Jr., & Shanklin, 1982).

Murphy (1994) suggested that agencies were most responsible for client-agency conflict based on the results of her decision structure comparison study of agencies and clients. She argued that "flawed self-understanding and inconsistent decision making, particularly among agency professionals, accounted for most disagreement in practice" (p. 209), and that an agency's misjudgment of a client's reaction to a proposal might explain agency-client conflict. Murphy's study provides a valuable insight for this study. She argues that agency-client conflicts arise not because of a lack of information flow or communication, but because of different cognitive processes, leading each side to arrive at different decisions based on the same information. If the agency-client counterparts could identify their dissimilar values and cognitions, they might better understand the true cause of conflict and could eventually be able to cooperate more productively. This concept of "cognitions" characterizing "the typical judgment profile" (p. 227) of different professions is further explored in the next section.

In this study, conflict is conceptualized as expressed or implied tension between clients and agencies in business context: Conflict in personality or "chemistry" level is not considered. The result of conflict is likely negative rather than constructive, leading to possible termination of the relationship.

Worldview of Public Relations

What Murphy called cognitions are more generally known as worldview. J. Grunig and White (1992) argued that it is possible to distinguish excellent public relations from less excellent public relations by comparing and evaluating the worldviews on which they are based. J. Grunig and Hunt (1984) developed four models of public relations based on the assumption of four different worldviews. However, J. Grunig (1989) later acknowledged that three of the models were variations of a single dominant worldview that public relations is a tool to manipulate the public for the benefit of the organization, while the fourth, known as the two-way symmetrical model, represents a break from that dominant worldview. This study uses these two worldview dimensions, the asymmetrical worldview and the symmetrical worldview, as a basic framework.

Drawing upon literature throughout the humanities and social sciences, J. Grunig and his colleagues (J. Grunig, 1989; J. Grunig & White, 1992) summarized the variety of interpretations of the concept of worldview. These comprised macrothought, schema, a set of images and assumptions about the world, and paradigm. In addition, a disciplinary matrix that stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community, a conceptual framework, comprehensive mind-set, presuppositions, and gestalt were included in the definition.

Based on compilations of the research, J. Grunig and White (1992) argued that the practice of public relations was affected by the assumptions and the presuppositions that practitioners have. In addition, people not involved in public relations have other assumptions about the profession, and such assumptions cannot be easily changed because they are traditionally rooted in the culture of organizations, communities, and societies.

J. Grunig and White originally used the concept of worldview to help practitioners and scholars better understand the concept of excellent public relations through an understanding of "the worldview that undergirds these concepts" (p. 33). J. Grunig (1989) argued that to change the way organizations practice public relations, the dominant presuppositions about public relations must first be changed.

In this study, worldview is defined as a point of view of the world we live in, and a "subjective and generally rigid" mindset (J. Grunig & White, 1992, p. 33). A person with a particular worldview will likely pay more attention to phenomena that seem to fit his or her worldview, while paying less attention to, or completely ignoring, the stimuli or theories that do not fit his or her worldview. He or she may go a step further, deeming this new situation as completely inappropriate.

J. Grunig and White (1992) argued that the view that public relations is asymmetrical, that public relations has an advocacy role in society, and that public relations is a technical function, has limited the excellence and accompanying effectiveness of public relations. In contrast, the view that public relations is symmetrical, critical and managerial, could foster excellent public relations.

In this study, J. Grunig and White's conceptualization of worldviews has been adapted to examine the agency-client relationship. This study suggests that the public relations worldview has two dimensions: symmetrical and asymmetrical (Deatherage & Hazleton, 1998). Depending upon the agency and client's worldview, the likelihood of their relationship will vary. Therefore, the first hypothesis is:

H1: The wider the gap between the public relations worldviews that the agency and client hold, the more conflict will likely occur between them.

This study also postulates that the worldviews of public relations have three components: social responsibility, role expectation, and program evaluation criteria components.

Social Responsibility Component

It was suggested above that the worldview held by an organization's public relations department doesn't originate in a vacuum, but relates closely to the worldview of the particular organization and its management. The less healthy worldview the organization has, the less likely it will practice excellent public relations (Deatherage & Hazleton, 1998).

J. Grunig and White (1992) suggested that the dominant worldview in public relations is the asymmetrical view that public relations is a way of getting what an organization wants without changing its behavior or without compromising. The asymmetrical worldview is well exemplified in a Korean Chaebol's use of public relations (Choe, 1992). During the Asian economic crisis, the Samsung Group was strongly criticized by a variety of publics because its newly established subsidiary, Samsung Motors, put a severe strain on the nation's economy. When it became obvious that the Chairman of Samsung made an ill-timed $1.8 billion investment to enter an overcrowded automobile industry, with a hint of desperation, the company continually fired off press releases about a potential rescue by Ford Motor Company, which seemed decidedly cold to the idea (Kraar, 1998). Eventually, Samsung's asymmetrical worldview, which led its public relations practitioners to misuse public relations skills, proved unethical, socially irresponsible, and ineffective, just as J. Grunig and White (1992) predicted. Samsung had to abandon the automaker later to Renault.

In a case like Samsung, no one public relations practitioner of the corporate communication team is solely accountable for the approach that it took to communication; rather, to understand the fundamental worldview that led to such a socially irresponsible practice, "one must look at the cultural presuppositions of the organization as well as the presuppositions of public relations" (J. Grunig & White, 1992, p. 42). In any case, an agency if hired by Samsung to distribute the false press releases, would likely undergo inter-organizational conflict with the client. The second hypothesis is:

H2: The bigger the gap between the point of view regarding social responsibility that the client and agency hold, the more conflict there will be between them.

Role Expectations Component

Drawing upon the practitioner role literature (Broom & Smith, 1979), Dozier (1984) found the two major roles of public relations practitioners through factor analysis: a communication manager role and a communication technician role. According to Dozier (1992), managers make communication policy decisions and are held accountable for public relations outcomes. Managers see themselves and are seen by others in the organization as communications and public relations experts. "They facilitate communication between management and publics and guide management through . . . 'a rational problem-solving process' " (p. 333). In contrast, technicians are not involved in management level decision-making. Rather, they conduct "the low-level mechanics of generating communication products that implement policy decisions made by others" (p. 333).

Given the fact that public relations departments within Korean corporations strongly focuses on media relations (Y. Kim, 1998), and that the media relations specialist is another type of technician (Dozier, 1992), many Korean corporate communication departments may be said to play a technical role. There are well-paid management public relations practitioners in Korean corporations. However, although they make some policy decisions, and are responsible for the outcomes, they shouldn't be categorized as managers according to Dozier's definition because their main responsibility is media relations.

Y. Kim (1998) analyzed Korean practitioners in corporations and agencies to identify which public relations models are predominantly employed in Korea, and concluded that the press agentry model and the public information model were primarily used. But as Dozier noted (1984), because agency consultants play different roles from their corporate counterparts, treating these two different role groups as one unit of analysis doesn't provide insight into how and why they are different. While the roles for the practitioners inside organizations are relatively enduring, the roles for agency consultants shift, depending on their clients (Dozier, 1992). In other words, agency consultants are capable of playing both roles, taking on a managerial or technical role, depending upon their client's expectations.

According to Dozier (1992), the roles that public relations practitioners play are "key to understanding the function of public relations and organizational communication" (p. 327). However, due to public relations' short history, the practitioner's function is subject to substantial "role ambiguity" (Ahlwandt, 1984, as cited in Dozier, 1992). Subsequently, among practitioners, this role ambiguity often becomes "a negative factor, leading to role stress" (Dozier, 1992, p. 329). It is suspected that Korean practitioners undergo this role stress because although they actually practice the press agentry and public information model of public relations, they aspire to practice the two way symmetrical model (Y. Kim, 1998). It is also suspected that agency consultants will feel more role stress since their roles reflect their client's expectation, not their own or even their organizations. In contrast, corporate practitioners in Korea likely suffer relatively low role stress because the expectations of their roles are quite consistent. Therefore, a third hypothesis is:

H3: The wider the gap between the role expectation of a public relations practitioner that the client and agency hold, the more conflict there will be between them.

Evaluation Criteria Component

Evaluation of public relations programs is important because its proper use can prove the efficacy of public relations programs and may guarantee the continuity of such programs (Broom & Dozier, 1990). Y. Kim (1998) notes public relations practice in Korea is mainly focused on publicity and media relations, thus evaluation criteria automatically likely fall in these areas. In other words, close relationships with journalists, the number of result clippings, the size of the clippings, and protection ability (the capability of a public relations practitioner to have a negative article about his or her organization reworded prior to the printing of later editions for nationwide distribution) are the main evaluation criteria for public relations practices. Internal public relations departments that are not equipped with professional knowledge of public relations, have a tendency to concentrate more on these media relations activities as they do not require expertise or creative thinking.

When Korean companies hire a public relations agency, however, they are likely to do so for reasons other than publicity, that is, for professional consulting, or for large, creative plans which are not internally available, as companies in the United States do (Ritchie & Spector, 1990). But evaluative criteria for professional consulting or creative ideas is much more subjective compared with counting the number or size of clips. Thus, certain public relations practices can be regarded as a success by the agency but as a failure by the client, or vice versa, due to different evaluation criteria. Therefore, a fourth hypothesis is:

H4: The wider the gap between the client and agency's evaluation criteria, the more conflict between them.

Method

A cross-sectional survey was conducted to examine agency practitioners' and clients' worldviews of public relations and their relationship status.

Sample

There were 26 public relations agencies in Korea as of September 7, 2000, according to the Korea Public Relations Association. To ensure that sufficient data were obtained, a census approach was taken. There were additional reasons for this approach: As suggested earlier, Korean public relations agencies have had a strong multinational client base, having started to take local organizations as clients only recently. Thus some public relations agencies might not have local clients. Additionally, it was expected that some agencies might refuse to participate in the study because they would be uncomfortable divulging information about their relationship with clients (Pincus, Acharya, Trotter, & St. Michel, 1991). To alleviate this, the confidentiality element of this study was emphasized.

The representative of each public relations agency listed in the KPRA booklet or people at agencies personally known by the researcher were contacted by e-mail and fax, followed up by a phone call to request that the company participate in the study. Twenty-two of 26 agencies had local clients, and 18 of them initially agreed to participate in the study. All agency employees who worked with local clients were encouraged to participate.

Using a snowball sampling technique, these public relations agencies were asked to identify their current clients who would be appropriate candidates to participate in the study. Similar to the study of Pincus et al. (1991), the only stipulation was that the designated client had to agree to complete a questionnaire. None of the agencies initially provided a contact list for their clients, but instead wanted to view the client questionnaire before forwarding it to their clients. Upon reviewing the client questionnaire two agencies refused to continue with their participation in the survey.

Instrumentation

A self-administered questionnaire was initially written in English, and then translated into Korean. Two Korean public relations graduate students from a university in the United States reviewed the Korean questionnaire, comparing it with the English one. With minor revisions in the questionnaire to suit language and cultural differences, a pretest was conducted with two additional Korean graduate students and with one public relations team located in Korea. Through their feedback, additional revisions were made.

The survey was conducted through the use of e-mail, fax and phone. The survey questionnaire was sent to a designated person at each participating agency, who then distributed it to colleagues who were currently working with local clients. Subsequently, the client questionnaire was sent to the designated agency person and through similar process, forwarded to the respective clients.

Independent variable: worldview.

Although a questionnaire to test worldviews was developed by Deatherage and Hazleton (1998) based on the presuppositions defined by J. Grunig and his colleagues (J. Grunig, 1989; J. Grunig & White, 1992), those questions were not ideal for this study because they dealt with the broad concept of organizational worldview rather than the specific public relations worldview.

Rather, the four public relations models questionnaire developed by J. Grunig, and used by several others (Deatherage & Hazleton, 1998; J. Grunig et al, 1995; Kim & Hon, 1998), proved to be a useful instrument for measuring the two components of the independent variable: the social responsibility and the evaluation criteria. For example, a statement such as "Keeping a news clipping file is about the only way we have to determine the success of a program" could represent an asymmetrical worldview under the evaluation criteria component because it was taken from the public information model questionnaire of the four models that was, in turn, based on the asymmetrical worldview (J. Grunig et al., 1995).

A statement such as "The purpose of public relations in our company is to change the attitudes and behavior of management as much as it is to change the attitudes and behavior of publics" represented a symmetrical worldview under the social responsibility component, because it came from the two-way symmetrical model questionnaire that was, in turn, based on the symmetrical worldview (J. Grunig et al., 1995). When modified, these statements were appropriate for this study.

For the role expectation component, the manager-technician typology that emerged from Dozier's (1992) factor analysis provided a base for operationalization. In a symmetrical worldview, public relations practitioners are likely to play a managerial role, whereas in an asymmetrical worldview, they are more likely to play a technician role. Thus, five of the items that have been used to distinguish manager role and technician role (Dozier, 1992) were appropriate, when modified, to test the role expectation component. The researcher developed an additional statement to further elaborate on the research question.

In summary, 18 statements were used to measure the independent variable, with six statements representing each of three components that constituted the respondent's worldview. Three of the six items for each component were related to the symmetrical worldview, while the other three were related to the asymmetrical worldview. Participants responded to each statement using a five-point Likert scale with the following response categories: strongly disagree; disagree; agree; strongly agree; and don't know. Three respondents chose 'don't know' for six statements, and all were replaced with their calculated means for each of their symmetrical and asymmetrical worldview responses.

Dependent variable: conflict.

Using the respondents' worldview of public relations as the independent variable, their experience of conflict as represented by their responses on four survey questions established the study's dependent variable. The operationalization of the concept of conflict was a challenge for this study, because unlike other studies that purported to find the area of conflict throughout the public relations planning process using the coorientation approach (Pincus et al., 1991; St. Michel, 1988), this study sought to determine if a different degree of conflict existed due to divergent worldviews.

For this study, the existence of conflict was defined broadly. While more obvious incidents of conflict, such as severe arguments or withdrawal from the relationship might not have occurred, it was possible that at least one party might feel something was not right with the relationship. This was construed as the existence of conflict, because it might, in the long run, be harmful to the relationship. Thus, conflict in this study was operationalized as "the number of disagreements between client and agency over the past two months," "the number of arguments between client and agency over the past two months," "the number of consideration for withdrawal from the relationship," and "overall tension level in the relationship on zero to ten scale."

Results

Of the 16 agencies that initially agreed to participate in the study, the final data were collected from eight agencies and their matching clients, for a response rate of 50% at the organizational level. However, the sampling technique employed does not provide a clear basis to calculate the response rate at the individual level.[2]

As four of the participating agencies responded with more than one client, 15 distinct agency-client pairs were obtained. While overrepresentation by some agencies was a limitation of this study, the 15 pairs reflected different clients and different agency personnel, and represented a cross-section of local industries, ranging from government agencies to healthcare to new media companies. In addition, five responses from agencies and two responses from clients without a respective matching pair were received. They were included in all the tests except the hypotheses tests that required matching pairs.

Descriptive Data

The instrument for this study included three sets of items: symmetrical worldviews, asymmetrical worldviews, and conflict level measures.

Based on a four-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree), overall, the agency practitioners showed higher means (M = 3.33, SD = 0.64) than clients (M = 2.68, SD = 0.76) regarding symmetrical worldview (see Table 1). Consistent with this result, the agency practitioners showed lower means (M = 2.46, SD = 0.65) than clients (M = 3.05, SD = 0.78) in asymmetrical worldview (see Table 2). This outcome indicates that a considerable gap exists between agency practitioners and clients in Korea in terms of their worldviews of public relations and that agency personnel have more symmetrical worldviews than clients.

In the symmetrical worldview measures (Table 1), the agency personnel showed the highest mean in the second item of the social responsibility subset (M = 3.75, SD = 0.44). This indicates that agency personnel believe the role of public relations is to change the attitudes and behaviors of management as much as that of the publics. The agency personnel also believed that public relations is more than publicity. However, they didn't feel that public relations practitioners play an important role in organizational decision-making (M = 2.65, SD = 0.67).

The clients (Table 1), in contrast, demonstrated the lowest mean in the second item of the social responsibility subset (M = 2.53, SD = 0.94) but the highest in the third item of the same subset (M = 3.12, SD = 0.78). This inconsistency indicates that while clients sought mutual understanding between their organization and their publics, they prefer that this be accomplished through a change in the publics' attitude and behavior.

In the asymmetrical worldview measures (Table 2), the agency personnel demonstrated strong resistance against including inaccurate information in press releases (M = 1.65, SD = 0.67). In addition, they didn't agree that they do not need to volunteer unfavorable information about their clients. As the mean of the third item in the role expectation indicated, agency personnel didn't want to be limited to only the technical aspects of public relations (M = 1.85, SD = 0.59). However, they recorded their highest mean in the item of the same subset that stated that the ability to write good press releases was an important quality for a public relations practitioner (M = 3.25, SD = 0.64). This indicates that although the agency personnel aspire to be treated as more than a technician, they themselves believe in the technical aspects of their profession. By showing a low mean in the item stating that public relations is essentially the same as publicity, the agency personnel again demonstrated their belief that public relations is more than publicity.

Compared with responses from the agency personnel (Table 2), clients were more willing to accept the possibility of including inaccurate information in press releases if it helped their companies during a difficult period (M = 2.53, SD = 0.94). Clients also showed high scores in the first item and second item of the social responsibility scale, indicating that they see the publics as objects to manipulate. In the role expectation and evaluation criteria subsets, the clients indicated their belief that public relations is mainly related to publicity and media relations, as contrasted with the agencies' responses. But clients didn't agree that public relations practitioners should be limited to technical work as shown in the third item of the role expectation subset (M = 2.41, SD = 0.62).

Conflict measures showed a pattern of slightly higher scores for the clients (Table 3). In argument measures (See Table 4), 70% of agency personnel and 71% of clients replied "no arguments," which contrasted with their "intention to withdraw" responses (only 35% of agency personnel and 41% of clients respectively responded "no intention to withdraw"), and their "level of tension" responses (40% of agency personnel and 53% of clients respectively were located from zero to two on the continuum.). This indicates that due to the unique relationship of agency personnel and clients, even though they might have serious conflict with their counterparts and wanted to pull out of the relationship, they are unlikely to be involved in arguments with each other.

t Tests of Worldview Differences between Agency Personnel and Clients

In the reliability tests of the worldview indices, satisfactory levels were achieved for overall symmetrical worldviews and asymmetrical worldviews. Cronbach's alphas for the symmetrical worldviews and the asymmetrical worldviews of agencies and clients combined were .84 and .75 respectively.[3] With these satisfactory reliability results, symmetrical and asymmetrical worldview indices were constructed by adding nine symmetrical response values and nine asymmetrical values respectively.

As discussed earlier, the agency personnel demonstrated higher means than clients in symmetrical worldviews (See Table 1) and lower means than clients in asymmetrical worldviews (See Table 2). To see if they were significantly different, independent samples *t* tests were conducted using symmetrical and asymmetrical worldview indices as the dependent variables.

Table 5 demonstrates that the mean of the agency personnel (M = 29.95, SD = 2.89) was significantly higher than the mean of the clients (M = 24.06, SD = 4.56) in symmetrical worldviews ($t = 4.60$, $df = 26.22$, $p < .001$, two tailed). Table 6 also demonstrates that the mean of the agency personnel (M = 22.15, SD = 2.64) was significantly lower than the mean of the clients (M = 27.47, SD = 3.63) in asymmetrical worldviews ($t = -5.15$, $df = 35$, $p < .001$, two tailed).

Tests of Hypotheses

To examine the relationship between agency personnel and client's worldview of public relations, and the nature of these groups' reciprocal relationship, the worldview gap scores for each of the 15 client-agency pairs were calculated. To create worldview gap scores, each individual client response value in the 18 worldview variables was subtracted from its matching agency response value, with the absolute value of the difference taken as a gap score for the individual variable. Selected individual gap scores were added to generate social responsibility, role expectation, and evaluation gap scores. To generate the overall worldview gap scores, all individual gap scores (18 variables) were combined.

To create conflict scores, a reliability test of conflict items was conducted. A satisfactory level (.79) of Cronbach's alpha was achieved for the conflict of agencies and clients combined. For the conflict index construction, the values of four conflict-related variables, "the number of disagreements," "the number of arguments," "the number of intention to withdraw," and "the tension level" by the agency practitioner and client in each pair were added. As the tension level was on different scale from the other three variables, it was weighted by dividing the response values by two. Subsequently, conflict scores for 15 pairs were generated.

The four gap scores of each pair were correlated with the conflict index of each pair using Pearson product-moment correlation coefficients (Table 7). The result showed a strong correlation between overall public relations worldviews and the conflict level ($r = .65$, $p < .01$), which supported H1. This indicates that as the gap between the agency personnel and client public relations worldviews widens, the more conflict that occurs between them.

The data (Table 7) demonstrated a very strong correlation between social responsibility gap scores and the conflict index, supporting H2 ($r = .82$, $p < .001$). This means that the bigger the gap between the agency and client's point of view regarding social responsibility, the more conflict between them.

However, H3 was not supported ($r = -.03$, $p = .91$). There was only a weak negative relationship between the role expectation and the conflict level (See Table 7).

Explored next was the relation between program evaluation criteria and the conflict level. Table 7 demonstrated a strong correlation between them, supporting H4 ($r = .61$, $p < .05$). This indicates that as the gap between the client and the agency's evaluation criteria widens, the more conflict that exists between them.

Discussion

The purpose of this study was to assess to what extent different worldviews of public relations is related to the agency-client relationship. A substantial gap in the worldviews existed between the agency personnel and clients in Korea. The clients turned out to have a more asymmetrical worldview compared to the agency personnel. This outcome is not surprising, as Korean organizations have traditionally focused on media relations and are therefore unfamiliar with professional public relations strategy and skill (Y. Kim, 1998). On the other hand, public relations consulting industry has had to adapt to the global standard of public relations because their main client base has been multinational corporations.

Conflict level responded by agency personnel and clients was relatively low. However, intention to withdraw from the relationship and level of tension felt by both parties was higher than the occurrence of disagreements or arguments. Unlike other types of relationships where bargaining and negotiation are commonly employed to resolve conflict (Wehr, 1979), the client-agency relationship is unique in that both parties, especially clients, can switch their counterparts without much pain involved. In addition, because agencies usually take a subordinate role in the relationship, conflict, which in minor form might lead to enhancing the relationship, may not surface until the relationship is severed.

The test of H1 showed that when the agencies and clients have similar overall worldview of public relations, they likely undergo less conflict. On the other hand, when they have wider gap between their worldviews, they are likely to have more conflict. This indicates that while the causes of the client-agency conflict may vary, public relations worldview is a strong factor in determining healthiness of the client-agency relationship. Therefore, the effort to narrow the public relations worldview among clients and agencies needs to be made for their mutual goal achievement.

Results demonstrated that client and agency's social responsibility level might be a strong indicator for their relationship status (H2). While clients are more willing to manipulate publics to achieve their goals than agencies because of their direct interests, they might put agencies in a difficult position. Agencies should meet their clients' needs, but at the same time, they wouldn't want to take risks that might affect their reputation and business in the long run, for one client. This dilemma likely adds to the conflict level and may eventually lead to the termination of the relationship.

The test of H4 showed that evaluation criteria could be an indicator for client-agency relationship, as well. Evaluation of campaign outcome is important in any client-agency relationship because the maintenance of relationship is often decided based on the evaluation. If clients appreciate agencies' work and if agencies meet clients' expectation upon similar criteria, their relationship will likely undergo less trouble.

Data indicated that there is no significant relationship between the points of view regarding practitioner role expectation and conflict level (H3). The outcome of H3, however, may be the result of the operationalization of the independent variable instruments. Descriptive data demonstrate that both the clients and agencies gave inconsistent responses to role expectation items. Rather than discarding the relation of role expectation and conflict level based on this study, more reliable statements need to be tested.

This study has limitations as well as strengths. One of the study's limitations involves the small number of participants. Even considering the fact that the total number of agencies in Korea is small, the participation level was disappointing. In addition, overrepresentation of agencies with a large local client base limits the generalizability of these results.

Another limitation involves the reliance on the agencies to both recommend and contact the clients, with some agencies distributing and retrieving the client questionnaire. [4] In addition, we do not know if the clients initially recommended by the agencies were recommended because of lower conflict level.

The major strength of this study is that the conflict level between the client and agency was assessed by directly asking for the information from the respondents. Although client-agency conflict issues have been explored before (Bourland, 1993; Johnson, 1989; Pincus, Acharya, Trotter, & St. Michel, 1991; St. Michel, 1988), they have been done with content analysis or indirect measurements, such as coorientation measures, due to the sensitive nature of the issue. With the direct method employed here, this study provides insight into the actual beliefs of clients and agencies, and how their differences may affect their relationship.

There are several implications of these findings. First, Korean agencies and clients should work to narrow the gap in their public relations worldview, which could prove to be beneficial to the achievement of their mutual goals. Although lower levels of conflict may be achieved if agencies take on a more asymmetrical worldview, both the agencies and clients should focus on improving their symmetrical worldview for the development of public relations in Korea to continue. Strategies other than publicity also should be developed.

Second, Korean agencies need to do a better job of understanding the attitudes and viewpoints of local clients. While it might be easier to deal with multinational clients with little knowledge of the market, the agencies should patiently educate and guide the clients on the value of public relations as Korean organizations outsource more of their public relations.

Third, to compete in global markets, Korean corporations must learn to use public relations as their global competitors do. Manipulating the publics, relying on publicity, and other common practices would not be as successful in developed countries as in Korea.

As an exploratory study of the client-agency relationship, this study was limited to the Korean public relations industry. As a next step, similar studies should be conducted in other national and cultural settings.

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Table 1

Means and Standard Deviations for Symmetrical Worldview

	Agency personnel (N=20)		Clients (N=17)	
Items	M	SD	M	SD
Symmetrical worldview	3.33	.64	2.68	.76
Social responsibility	3.45	.61	2.77	.78
1. Press release should contain only the truth, nothing but the truth	3.25	.72	2.65	.61
2. The purpose of public relations is to change the attitudes and behavior of management as much as it is to change the attitudes and behaviors of publics	3.75	.44	2.53	.94
3. The purpose of public relations is to develop mutual understanding between the management of the organization and publics the organization affects	3.35	.67	3.12	.78
Role expectation	3.02	.65	2.63	.81
1. Public relations practitioner plays an important role in management's decision making	2.65	.67	2.59	.62
2. To be a capable public relations practitioner, education or training in communication or management is important	3.10	.72	2.76	1.09
3. Public relations practitioner is the one who make communication policy decisions in the organization	3.30	.57	2.53	.72
Evaluation criteria	3.52	.67	2.63	.70
1. Media relations is only one of many public relations function	3.40	.68	2.59	.71
2. There are more important areas that public relations can contribute to in an organization other than publicity	3.65	.49	2.65	.79
3. There are many other areas that public relations team or agency should focus, in addition to media relations	3.50	.83	2.65	.61

Note. Items measured were on a 5-point scale: 1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree, and 5=don't know. All three "don't know" responses were replaced with the individual respondent's symmetrical worldview means.

Table 2

Means and Standard Deviations for Asymmetrical Worldview

	Agency personnel (N=20)		Clients (N=17)	
Items	M	SD	M	SD
Asymmetrical worldview	2.46	.65	3.05	.78
Social responsibility	2.4	.70	3.02	.85
1. In public relations the broad goal is to persuade publics to behave as the organization wants them to behave	2.90	.85	3.35	.61
2. In public relations, one mostly disseminates accurate information but does not need to volunteer unfavorable information	2.65	.59	3.18	1.01
3. In public relations, one may include inaccurate information in press releases if it helps the company in very difficult situation	1.65	.67	2.53	.94
Role expectation	2.58	.66	3.02	.67
1. One of the important qualities for public relations practitioner is his or her ability to write good press releases	3.25	.64	3.35	.70
2. Public relations practitioner's important role is to build and maintain media relations even when he or she is in management level	2.65	.75	3.29	.69
3. Public relations practitioners are mainly responsible for technical aspects of producing public relations materials	1.85	.59	2.41	.62
Evaluation criteria	2.4	.58	3.12	.82
1. Keeping unfavorable publicity out is an important task of public relations	2.65	.49	3.47	.62
2. Keeping a news clipping file is an important way we have to determine the success of a program	2.75	.55	2.76	.97
3. Public relations and publicity mean essentially the same thing	1.80	.70	3.12	.86

Note. Items measured were on a 5-point scale: 1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree, and 5=don't know. All three "don't know" responses were replaced with the individual respondent's asymmetrical worldview means.

Table 3

Means and Standard Deviations for Conflict

	Agency personnel (N=20)		Clients (N=17)	
Items	M	SD	M	SD
Conflict				
1. How often have you had disagreements with your client (or agency) over last two months?	1.72	1.45	1.75	1.53
2. How often have you had arguments with your client (or agency) over last two months?	.5	1.10	.56	1.09
3. Have you ever wanted to withdraw from the relationship with your client (or agency)?	1.61	1.72	1.63	1.75
4. What is the level of tension between you and your client (or agency) on 0-10 continuum?	3.06	1.96	3.00	2.19

Note. Items 1 through 3 measured were on a scale ranging from none to 1 time, to more than 5 times. Item 4 was measured on 0 - 10 continuum. Two agency practitioners and one client didn't respond on conflict measures and they were treated as missing cases.

Table 4.

Frequencies for Responses to Conflict Questions

	Agency personnel	(N = 20)	Clients	(N=17)
Items	Frequency	Percentage	Frequency	Percentage
How often have you had disagreements with your client (or agency) over last two months?				
None	5	25	4	24
1 time	2	10	3	18
2 times	7	35	6	35
3 times	2	10	-	-
4 times	1	5	2	12
more than 5 times	1	5	1	6
missing	2	10	1	6
How often have you had arguments with your client (or agency) over last two months?				
None	14	70	12	71
1 time	1	5	1	6
2 times	2	10	1	6
3 times	-	-	2	12
4 times	1	5	-	-
more than 5 times	-	-	-	-
missing	2	10	1	6
Have you ever wanted to withdraw from the relationship with you client (or agency)?				
None	7	35	7	41
1 time	3	15	2	12
2 times	2	10	1	6
3 times	4	20	2	12
4 times	-	-	4	24
more than 5 times	2	10	-	-
missing	2	10	1	6
What is the level of tension between you and your client (or agency) on 0 - 10 continuum?				
0	2	10	1	6

Items	Frequency	Percentage	Frequency	Percentage
1	1	5	5	29
2	5	25	3	18
3	4	16	-	-
4	1	5	1	6
5	3	15	3	18
6	1	5	3	18
7	1	5	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-
missing	2	10	1	6

Table 5

Two-tailed Independent Sample t Test for Agency Personnel and Clients about Symmetrical Worldviews

Variable	M	SD	t	df	p
Agency personnel (N=20)	29.95	2.89	4.60	26.22	.000
Clients (N=17)	24.06	4.56			

Note. Mean represents the average score of symmetrical worldview index that is an added value of nine statements, ranging from 16 to 34.

Table 6

Two-tailed Independent Sample t Test for Agency Personnel and Clients about Asymmetrical Worldviews

Variable	*M*	*SD*	*t*	*df*	*p*
Agencies personnel (N=20)	22.15	2.64	-5.15	35	.000
Clients (N=17)	27.47	3.63			

Note. Mean represents the average score of asymmetrical worldview index that is an added value of nine statements, ranging from 16 to 33.

Table 7

Pearson Product-moment Correlation Coefficients for Public Relations Worldviews and Conflict Level amongst 15 Agency-client Pairs

	Worldviews	Social responsibility	Role expectation	Evaluation criteria
Conflict level	.65**	.82***	-.03	.61*

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Notes

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[1] This argument is based on the researcher's observation of the Korean public relations industry over 7 years from 1993 to 1999 while working at a major public relations firm.

[2] The survey questionnaire was initially sent to one designated person at each agency. He or she distributed a copy of the questionnaire to the practitioners within the agency who work with Korean clients. Because the internal distribution was beyond the researcher's control, the information of how many surveys were distributed is not available. Some practitioners returned the answered agency questionnaire to the researcher directly via e-mail and others through the designated person. The designated person with aides of his or her colleagues working with Korean clients sent client questionnaire to the respective client counterparts. Again, the information of how many surveys were distributed to clients is not available. Some clients returned the answered questionnaire to the researcher directly and others through their agency counterparts. A few number of clients were contacted by the researcher via phone upon their request and telephone interviews were conducted with the questionnaire. Even in these cases, the agency counterparts requested a copy of the client's responses.

[3] Reliability tests also were conducted on three worldview subsets. A borderline level .62 was achieved for social responsibility subset, a low level .56 for role expectation subset, and .74 for evaluation criteria subset.

[4] Given the nature of the questionnaire, client participants may have offered only the conflict level they considered socially acceptable. This limitation may account for the fact that most of the clients' responses received through the agencies consistently demonstrated low level of conflict. Considering the clients showed a pattern of higher scores in conflict measures

than the agencies in general, direct contact with all the clients by the researcher might have produced more reliable conflict level scores.

PR

Running Head: COMPANY AFFILIATION AND COMMUNICATIVE ABILITY

Company Affiliation and Communicative Ability: How Perceived Organizational Ties Influence Source Persuasiveness in a Company-Negative News Environment

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Company Affiliation and Communicative Ability: How Perceived Organizational Ties Influence Source Persuasiveness in a Company-Negative News Environment

Abstract

The influence of attributing corrective information to different spokespersons in the wake of company-negative accusations was investigated experimentally. In particular, the research pitted a company's own public relations sources against sources working for a firm hired by the maligned organization and sources employed by agencies investigating negative claims independently. Results suggest that PR sources are less credible than outside sources. Over time, however, PR sources are judged as equally credible as hired and independent sources.

Company Affiliation and Communicative Ability: How Perceived Organizational Ties Influence Source Persuasiveness in a Company-Negative News Environment

In the first chapter of The Process and Effects of Mass Communication (Schramm & Roberts, 1971), Schramm states that an unspoken contract is present in communication. Role patterns and cultural value systems create expectations of persons who enter into communication relationships, and these expectations vary with the goals of the relationship. If the goal of the relationship is to merely transmit information, then the communicator is expected to be knowledgeable, accurate, and fair. An unspoken contract is present and both sender and receiver have expectations placed upon them by the other. However, Schramm states there is no contract involved in a persuasive situation. "The receiver enters with his guard up," (p. 35) and the persuader enlists into a relationship with handicaps that other communicators do not have to shoulder.

Public relations-based messages are persuasive at heart. While in most cases not overtly attempting to modify an audience's attitude in an extreme way, public relations messages are written with the goals of the organization in mind and with an intention of improving or maintaining favorable impressions or beliefs about the organization. Because public relations messages are persuasive, practitioners are involved in the type of communication relationship Schramm described as having no contract and wary receivers. These receivers with their "guards up," as Schramm describes them, are at the core of the public's negative image of public relations as it has been recently revealed through research.

In the summer of 1999, the Public Relations Society of America released the results of a five-year credibility study it had sponsored with the support of the Rockefeller Foundation. The results indicated that public relations specialists ranked 42nd out of 44 public figures on a credibility index (see "PR deserves its low credibility marks," 1999). In fact, PR professionals were ranked ahead of only talk show hosts and famous entertainers. A previous study suggested that the general public is not alone in its poor perception of PR practitioners. In fact, PR students did not have much more faith in practitioners than did the public at large. In a study employing students enrolled in introductory PR courses as respondents, researchers found that half of first-time public relations students agreed that "honesty is a relative term" in public relations, and 71% agreed or strongly agreed that public relations specialists "make flower arrangements of the facts" (Saunders, 1993). It is no wonder that Newsom, Ramsey, and Carrell (1993), in research where they surveyed PR educators, Public Relations Students Society of America chapter presidents and PR professionals, found that only 11% of the respondents answered "yes" or "definitely yes" when asked, "Is the current image of public relations and its practitioners a favorable one?"

Supporting the survey research findings, Callison (in press) attempted to demonstrate the public's negative perception of PR through experimentation. Participants were presented with a set of messages attributed to one of two sources. In one set of articles, the information source was labeled as a public relations specialist; in the other, the information source was labeled as a company spokesperson. All text in the articles was held constant across message conditions with only the identification of the source's occupation changing. Despite the fact that more than 98% of the text was identical across message conditions, participants were much more critical of both the public relations source and the organization employing the source than they were of the spokesperson source and the accompanying organization. In fact, PR sources were viewed as less likely to be telling the truth, more dishonest, and less trustworthy.

Callison (in press) suggested that the public's negative perception of practitioners is rooted in a perceived reporting bias. Eagly, Wood and Chaiken (1978) conducted the first research suggesting that biases attributed to information sources influence the way the source and his/her information are judged. Eagly et al. argued that people want to understand why a communicator takes a particular position on a topic and receivers are motivated to attribute fabricated qualities to a speaker to help them understand why a position on an issue is advocated. Eagly et al. also contended that a receiver's explanation for a communicator's behavior influences the judgments that are made about a source's credibility. Of particular interest to PR practitioners and scholars, Eagly et al. stated that when receivers believe situational pressures (job requirements or audience expectations) cause a source to withhold certain facts, they conclude the source has a reporting bias and may have a compromised willingness to be honest.

The implications of the Eagly et al. research on the image of public relations seem obvious. As established earlier, the public associates public relations with bending the truth if necessary to make clients look positive. For the practitioner to position the client in the best possible light, the practitioner might be seen as telling the public what it wants to hear or withholding certain facts (Smith & Swinyard, 1982). To the public, it would seem that the PR industry mandates its sources maintain a reporting bias in favor of the client ("Behind the PRSA," 1999). It also seems that organizations would do well to use means other than the PR department to disseminate information.

In light of these findings, the public relations industry's most pressing client in need of an image boost may be the industry itself (Bovet & Moore, 1994; Englehardt & Evans, 1994; Harris, 1993; Saunders, 1993). If researchers know receivers' judgments of communicator trustworthiness are significantly influenced by information concerning the communicator's occupation (O'Keefe, 1990), then researchers also have to question the profession's ability to communicate to a wary public in a situation that Schramm called "a buyer's, not a seller's market" (Schramm & Roberts, 1971, p. 45). Ultimately, research has shown that the public is aware of the unique platform from which public relations practitioners speak, and the recipients of public relations messages doubt the honesty of an industry that they see as having a vested stake in maintaining favorable images of its clients.

In the end, organizations face tough decisions in determining how to communicate company-positive news following criticism. Public relations departments would most often be asked to quell any negative sentiment, and in fact, would most likely be best equipped to do so. Allowing the PR department to serve as the company's mouthpiece, however, seems like a risk in light of the credibility issues surrounding practitioners. The next best option then might be to bring in a source that could help clear the company's name. But one would assume a hired, outside source would appear just as biased as an in-house source, and the organization would have less control over a hired source's communications. At the far end of the source spectrum is a governmental (independent) source. In the face of criticism, an unbiased, unflappable governmental source would appear to be the best possible advocate if communication stemming from the source was company-positive. Organizational control over an independent source's communication, though, would seem almost unachievable. The dilemma is obvious. Does an organization risk being seen as not credible by allowing in-house sources, who would permit organizational control of message content, to speak on its behalf? Or does the organization give up some measure of control in favor of gaining public trust by hiring an outside source? The final option of an independent source speaking for an organization would probably not be left up to the organization. Instead, the organization would have to hope the independent source would intervene and find cause to take the company's side in an argument. Research that outlines the effects of source affiliation on message effectiveness would provide organizations with the information needed to justify using their own PR departments or provide them with the impetus to solicit independent intervention or bring in outside, hired researchers.

Hypotheses

Credibility Hypothesis

Survey research and limited experimental research suggests that PR practitioners are viewed as untrustworthy and not credible. Eagly et al.'s (1978) reporting bias research suggests that company-affiliated sources communicating positive information in the wake of company-negative accusations may be particularly vulnerable to negative public perception. Obviously, PR practitioners are often charged with countering negative information mediated about an organization with a rebuttal in the form of more positive information. To determine what the influence of being described as a PR practitioner has on a source's ability to successfully defend an organization, the following hypothesis was tested:

H1: When communicating company-positive news in a company-negative environment, sources identified as public relations practitioners will be viewed as less credible than hired, expert sources and/or independent sources.

Persuasiveness Hypothesis

As a result of practitioners being viewed as not credible, PR sources should be less persuasive in their attempts to convince audiences that company-negative reports are false and that company actions in response to allegations have been appropriate. To determine how information attributed to a public relations source is perceived in contrast to information attributed to a hired source or an independent source, the following hypothesis was tested:

H2: Information attributed to public relations sources will be less persuasive than information attributed to hired and/or independent sources.

Sleeper Effect Hypothesis

Sleeper effect research suggests that information sources are not spontaneously recalled as linked to the information they present (Pratkanis, Greenwald, Leippe, & Baumgardner, 1988). Because the present study is particularly focused on uncovering the communicative ability of company advocates and will vary the source of a corrective communication efforts, the study seems ideal for investigation of the relative sleeper effect, where sources high in credibility have no more persuasive ability than sources low in credibility over time. To determine how a time delay affects perceptions of a source or the information presented by the source, the following hypothesis was tested:

H3: Given that over time information sources are disassociated from their messages, the differences in credibility and persuasiveness between a public relations source, a hired source, and an independent expert source will fade.

Method

Overview

Undergraduate research participants read and evaluated mock news articles. The articles of key interest both covered scenarios where a company was blamed for placing people in situations where their health could possibly be negatively affected. In both scenarios, an initial article maligning the respective organizations was shown to participants. These same participants were then shown corrective articles that outlined research, which in both scenarios made the claim that the initial negative accusations were false. Manipulations in the corrective article made it possible to test which source (one identified as employed directly by the company, one identified as working for an outside organization hired by the company, and one identified as employed by an independent, governmental agency) was most trustworthy and capable of preventing negative public sentiment toward the respective company. An information strategy manipulation, where sources were armed with exemplar-laden arguments or base-rate laden arguments, was also tested. Because the intention of this paper is to report on a portion of a larger research project, information strategy is not considered in analyses.

Participant evaluations of the sources and information were taken either immediately after exposure or one week later to determine how the passage of time affected perceptions.

Research Participants

Research participants were recruited from introductory communication classes at a two large Southern universities. The responses of a total of 346 participants were included in analyses. Of these participants, 192 were female and 153 were male (one participant did not indicate gender). The average participant age was 20.

Procedure

In mixed-gender groups of about 140, participants were informed that they would be allowed the opportunity to take part in a news evaluation study. They were told the study would involve them reading several articles that had been clipped from various newspapers and photocopied. They were also informed that they would be asked to answer a series of questions after reading each article. In this initial data collection phase, no mention was made that follow-up measures would be taken one week later.

Following explication of the assignment, the participants were asked to read six articles. After reading each article, participants responded to a single page of dummy measures included to disguise the purpose of the study. Once the participants had read and completed the one-page questionnaire for each article, they completed four pages of measures designed to gauge perception of the sources, company actions, and initial negative accusations made in the key articles of interests. The group of participants in the delayed condition responded to a set of dummy items. These items were included so as not to inadvertently forewarn the delayed group that they were being treated differently.

One week after the first phase of the research was completed, the groups were retested. Participants were asked to complete four pages of measures identical to those completed by the "immediate response" group from phase one of the research. The second, delayed responses garnered from the immediate response group were not included in analyses.

Stimulus Material

Mock news articles were employed as the manipulated experimental stimuli. The articles were written and formatted to appear as typical news fare. All manipulations were carried out in two of the eight articles created. Of key interest was how source identification with an organization influenced perceptions. To test these variables, two scenarios were created. In one case, a foam rubber manufacturing facility, Chapman Enterprises, was being blamed for polluting the air and negatively affecting the health of people living near the facility. In the other case, an amusement park, Thrill-Ville, was being blamed for not properly monitoring safety devices, and one person claimed he had been injured due to a safety belt malfunction. Both accusational articles were accompanied by corrective articles, in which the manipulations occurred. In the corrective articles, which were said to follow the accusational articles by 5-10 days, a source revealed information that negated the claims made in the respective accusational article. All other articles were held constant. Each participant read the associated articles for both scenarios. It should be noted that the corrective articles seen by a single participant were consistent in their manipulations. Moreover, in order to camouflage the interest in the corrective articles, two filler articles were employed. One article covered an Arkansas court case where Cooper Tires was being accused of manufacturing tires in a faulty manner. Another covered Habitat for Humanity building homes in Mexico.

For presentation purposes, all articles and immediate measures were placed in coded packets. In all packets the Cooper Tire article came first; the Habitat for Humanity article fourth. The second and fifth placed articles in the packets were always one of the accusational articles. The articles holding these positions were systematically varied to ensure that each participant had an equal chance of seeing either in a particular position. The corrective articles always followed their respective accusational article.

Measures

After reading all articles and responding to the dummy measures, participants were asked to complete the key measures of interest. Participants in the delayed condition, however, initially responded to an additional set of dummy measures. The key measures were designed to reveal each participant's perception of the issue itself, the information presented in the article, and the information source. The order of the key measures in the packets was systematically varied.

After reading all articles, participants responded to 11 questions designed to reveal each participant's perception of the issue itself, the information presented in the article, the scenario surrounding the claims, and the information source cited in the article. Measures employed in previous research served as guides (Baesler & Burgoon, 1994; Brosius & Bathelt, 1994; Gibson & Zillmann, 1994; Krupat, Smith, Leach, & Jackson, 1997). All measures employed an 11-point scale ranging from 0 = *not* _______ *at all* to 10 = *extremely* _______. With the parenthetic information for each question set accompanying the items, the specific questions were as follows (the underlined word in each question was included in the scale anchors):

1. How severe is the threat mentioned in the article (i.e. air pollution produced by Chapman Enterprises) (i.e. safety oversights by Thrill-Ville)?

2. How likely is it that people will come to harm because of the threat mentioned in the article (i.e. air pollution produced by Chapman Enterprises) (i.e. safety oversights by Thrill-Ville)?

3. How safe is it to be in contact with the company mentioned in the article (i.e. live near Chapman Enterprises) (i.e. ride the Thrill-Ville attractions)?

4. How sure are you that the company is negatively affecting the health of those who come in contact with it (i.e. Valley View residents) (i.e. Thrill-Ville patrons)?

5. How appropriate was the company's response to the allegations that it is negatively affecting the health of those who come in contact with it (i.e. Valley View residents) (i.e. Thrill-Ville patrons)?

6. How scientifically sound was the research conducted that the company used to refute the claims that it is negatively affecting the health of those who come in contact with it (i.e. Valley View residents) (i.e. Thrill-Ville patrons)?

7. How concerned was the company that it was possibly harming people (i.e. that Chapman Enterprises was negatively affecting the health of area resident) (i.e. that Thrill-Ville was not providing a safe environment for park patrons)?

8. How responsible was the action taken by the company once it learned of the negative charges against it (i.e. that Chapman Enterprises was negatively affecting the health of area resident) (i.e. that Thrill-Ville was not providing a safe environment for park patrons)?

9. How trustworthy was Patrick Kendall (Gary Brice), the researcher who conducted the study that disputed the negative charges against Chapman Enterprises (Thrill-Ville)?

10. How knowledgeable was Patrick Kendall (Gary Brice), the researcher who conducted the study that disputed the negative charges against Chapman Enterprises (Thrill-Ville)?

11. How credible was Patrick Kendall (Gary Brice), the researcher who conducted the study that disputed the negative charges against Chapman Enterprises (Thrill-Ville)?

Analyses

To get a sense of how the individual scenarios influenced perceptions, data were analyzed separately for the Chapman scenario and the Thrill-Ville scenario. Additionally, participants' responses to each individual measure were collapsed across single items to obtain an overall measure for each of the 11 questions. Data were first submitted to univariate analyses of variance. Because it was of particular interest to discover how audiences perceived sources at different points in time, data were analyzed only within single time conditions. Thus, all data gathered immediately following exposure to the stimulus materials were investigated separately from all data gathered one week after exposure to stimulus materials. To determine how the passage of time influenced perceptions of a particular source's credibility, comparisons of means through t tests within the source conditions were also conducted.

Results

Credibility Hypothesis

H1 was supported. Factor analytic research into a source's ability to persuade has shown sources rating highly in trustworthiness, subject knowledge, and credibility serve as the most effective communicators (Berlo, Lemert, & Mertz, 1970; McCroskey, 1966; O'Keefe, 1990; Perloff, 1993; Priester & Petty, 1995). Because of the documented relationship between the qualities, measures for trustworthiness, knowledge, and credibility were submitted to analyses. In the immediate response condition, statistical investigation revealed significant effects for source knowledge and source credibility. The effect for knowledge in the Chapman scenario yielded $F(2, 177) = 3.13$, $p < .05$; that for source credibility in the Chapman scenario $F(2, 178) = 5.31$, $p < .01$; and that for source credibility overall $F(2, 178) = 4.96$, $p < .01$. All associated means are supplied in Table 1.

Additionally, effects approaching statistical significance were revealed for source trustworthiness in the Chapman scenario ($\underline{F}(2, 178) = 2.37$, $\underline{p} < .10$), for source trustworthiness overall ($\underline{F}(2, 178) = 2.64$, $\underline{p} < .10$), and source credibility in the Thrill-Ville scenario ($\underline{F}(2, 178) = 2.63$, $\underline{p} < .10$).

As can be seen in the table, PR sources across scenarios are perceived as significantly less credible than hired or independent sources immediately following exposure to the respective corrective responses. Likewise, PR sources in the Chapman scenario were perceived as significantly less credible and knowledgeable than their independent counterparts. The hired source in the Chapman scenarios did not receive ratings that were significantly different from those garnered by both PR and independent sources.

Although the effects were not significant across all measures and scenarios, a review of the data suggests a trend. In every instance, PR sources garnered the lowest scores of all sources. Also, independent sources received the highest rankings. For the most part, the rankings for hired sources more closely matched those of independent sources than they did the scores of PR sources. Noting that not all differences were statistically significant, the data nonetheless paints a grim picture of public relations practitioners in the realm of source credibility.

Persuasiveness Hypothesis

H2 was not supported. It seemed likely that the negative perception of public relations practitioners would carry over and result in audiences doubting information supplied by PR sources in support of their sponsoring organizations. The data suggest that this assumption is unfounded. Focusing on data gathered immediately following exposure to the stimulus material, analyses revealed no significant differences between PR sources, hired sources, and independent sources. All associated means are supplied in Table 2.

Relative Sleeper Effect Hypothesis

H3 was partially supported. Hypothesis 3 predicted that the difference in credibility and persuasiveness between a PR source, a hired source, and an independent expert source would fade over time. Initially, the three source credibility variables were investigated. One-way ANOVAs were performed across source within each time condition. Any differences uncovered within the immediate condition that dissolved in the delayed condition would support the hypothesis. As can be seen in Table 1, ANOVA suggested that there were significant differences between the groups in the immediate condition in three analyses. Differences existed across the knowledge measure for the Chapman article; across credibility measure for the Chapman article; and across credibility overall as outlined earlier in the discussion of H1. None of these differences, however, remained stable over time. Despite the immediate differences, participants perceived all sources as equally trustworthy, knowledgeable, and credible one week after initial exposure to arguments.

In hopes of discerning how passage of time affected judgments within the source factor, t-test comparisons were also made. As indicated in Table 1, only one difference, for the knowledge measure for independent sources in the Thrill-Ville article, ($t(106) = 2.05$), was significant at the .05 level. In this instance, independent sources in the Thrill-Ville scenario were viewed as less knowledgeable after time had passed.

Notwithstanding the lack of significant differences, the means do, however, possess a general tendency. In all but one case, independent sources lose some of their luster over time. Likewise, in all but two cases, PR sources achieve higher rankings over time. Overall, the data show that mean rankings of sources gravitate together after the passage of time, and that in fact, differences between sources fade over time.

To test how the passage of time influenced the persuasiveness of corrective arguments, ANOVA of the delayed data were conducted for the eight measures excluding those focused on credibility. Despite the fact that no differences attributable to source affiliation was discovered in the data gathered immediately following exposure to stimulus materials, statistical investigation revealed significant effects for scientific soundness of research and company concern in the delayed measure condition. The effect for research soundness in the Chapman scenario yielded $\underline{F}(2, 162) = 5.26$, $\underline{p} < .01$; that for research soundness overall $\underline{F}(2, 162) = 4.31$, $\underline{p} < .05$; and that for company concern overall $\underline{F}(2, 160) = 3.08$, $\underline{p} < .05$. Associated means are supplied in Table 2.

As displayed in the table, research presented by PR sources across scenarios and in the Chapman scenario in particular was viewed as significantly less scientifically sound than research presented by either hired sources or independent sources. Likewise, the respective companies were judged as less concerned with the possibility that they were possibly harming people when corrective arguments were made by PR sources as opposed to hired and independent sources. Across all measures, there were no differences between hired and independent sources. Additionally, t-test comparisons did not reveal any significant differences within the source conditions across the time condition.

Discussion

The goal of the present study was to determine if public relations practitioners can and do serve as credible conveyors of information. Foundational research has suggested that the general public and, in fact, PR professionals themselves doubt the ability of practitioners to act in an unbiased manner and accurately portray the truth as it pertains to their employers. The suggestions, however, have yet to be firmly established as fact. Rather, findings from survey research have simply discovered only that the public thinks poorly of PR staffers. Researchers conducting these studies often make a leap in assumptions and state that poor communicative ability must necessarily follow from such negative perceptions. But calling for a change in organizational communication patterns based on assumptions is no more merited than the assumptions themselves. For this reason, empirically testing public perception of practitioners and these same practitioners' ability to influence opinions is the logical next step in outlining the role PR should play in organizational communication. The present study takes that step.

Finally, it is important that experimental research into source efficacy tests hypotheses in a manner that allows for results to be generalized to typical communication scenarios. Granted, experimental research requires control, which ultimately limits the means of stimulus material production and distribution as well as the manner by which measures are taken. Nonetheless, researchers investigating company communication should attempt to limit as much as possible the leap that must be made from theory-testing data to practical, applicable information. To this end, measures were taken over two time periods. One immediately following exposure to stimulus materials; the other one week later. It was assumed, as theory suggests, that attitudes are susceptible to change over time. Again, the present study provides for an analysis of this assumption.

Public relations practitioners were, as predicted, judged as less credible than either hired sources or independent sources. Two components of this finding raise interesting points. First, although a participant could rightfully assume that both the PR source and the hired source are on the company's payroll, the PR source was ranked most harshly. Along the same lines, it is interesting that there was no significant difference between the hired sources and the independent sources. While hypotheses were formulated to facilitate testing PR sources against outside sources combined, intuitively one may have assumed that independent sources would have garnered the most favor because they would have the least inclination for being biased. If being seen as biased is a result of earning a paycheck from those defended, then PR communicators and hired sources are more similar than different. Results indicated, however, that hired sources were judged as equally credible as independent sources. The finding offers good and bad news for the PR department. The bad news is that PR practitioners serving as spokesperson are not credible. The good news is that PR staffs can buy credibility by farming out research to hired firms. Hoping that an unbiased source, such as an independent agency, will be viewed as more credible and possibly clear the company of wrongdoing does not seem worth the trouble.

Finally, data suggested that PR sources are seen as less credible and knowledgeable than outside sources immediately following exposure to arguments but are viewed as equally credible and knowledgeable after the passage of time. The implications of this finding are that, although cognitive mechanisms may alert audiences to be wary initially, these mechanisms are not long lasting, and over time PR sources are not judged so harshly. Previous credibility research would point to audiences forgetting a source's association with the public relations department over time and ultimately disassociating the information presented from its source. If this is in fact the case, PR sources are in the clear after some time. They can present information that may be doubted immediately but which over time is perceived just as favorably as if it had come from an unbiased independent agency. The idea that the negative effects stemming from association with PR will be washed away over time, however, seems unlikely.

Hypotheses 2 directly tested how source type influenced the persuasiveness of messages. Analyses revealed no differences across the measures in the immediate condition. For the appropriateness measure, there may have been no difference across the source manipulations simply because the respondents viewed any response as somewhat appropriate. They may have believed that any action is better than no action. Also, no difference may have become apparent across source types because one can view an action as appropriate even if it is performed by a questionable source. The same is true for the responsibility and concern measures. It is conceivable that a participant would doubt the information presented but still see the fact that the organization took action as the company being both appropriate and responsible as well as showing concern. Similarly, differentiation on the soundness of research measure may not have become evident due to participants not feeling equipped to make qualitative assessments of research techniques or findings.

Along the same vein, the measures intended to gauge the situation itself and not the organizational response may have been poorly conceived. The measures asked participants to rank the severity of the problem outlined in the accusation as well as how likely it was the people would come to harm because of it, how safe it was to be in contact with the company, and how sure the respondent was that the company was negatively affecting the health of people who came in contact with it. The measures were designed to provide a sense of how manipulation of source would alter perceptions of the damning situation. It was assumed that participants would react differently to the situation once they reviewed how the organization responded to it. Because these particular measures ask strictly about the accusations, there is no mention of the corrective response in any way. In the other questions, participants were cued to base their answers upon their feelings toward corrective article components, particularly the information source. With respondents not urged to look to particular facets of the message when formulating their answers to some of the questions, it is possible that participants disregarded the manipulations, which would ultimately produce little variations across the measures for each independent variable.

Hypotheses 3 focused on how the passage of time between exposure and measurement affects perceptions. The time factor is an important one because not all decisions having to do with an issue are made immediately after learning of it. For example, a person may learn today that a certain brand of tires has been found to be faulty. On the same day, that person may read the tire manufacturer's response negating the charges. This information then would be filed away until needed, if not forgotten. It is possible that the person might be in the process of buying tires the very day he/she hears from the accusers and the manufacturer. In that case, decisions could be made with the information fresh in mind. More likely, however, is that some time will pass before that person performs a task that has some relation to the information previously acquired. Past research has shown that attitudes towards message factors and source factors mutate and morph over time (Allen & Reynolds, 1993; Hovland & Weiss, 1951; Pratkanis et al, 1988).

The passage of time and its effect on audience perception of source credibility have been heavily studied. Of particular interests are the findings that show that the credibility of questionable sources fades less rapidly over time than does the credibility of sources previously established as credible. The interaction has been dubbed the relative sleeper effect (see Pratkanis et al., 1988, for a detailed discussion of the sleeper effect). The present study revealed a relative sleeper effect across several measures. Research participants viewed public relations practitioners working for Chapman Enterprises as significantly less knowledgeable than either of the outside sources immediately after exposure. One week after reading the arguments, however, all sources were viewed as equally knowledgeable. Likewise, PR sources overall were viewed as less credible in the immediate time condition. One week later, the PR sources were as credible as hired sources and independent sources.

The finding that source differences seem to wash out over time raises an interesting question. If PR sources can shed negative perceptions of themselves in a week's time, why worry about it? One obvious answer is that at the onset of a problem, when quality company-positive communication is at a premium, organizations cannot afford to wait for the negative credibility issues to subside. In the real world, organizations need to produce a credible communication campaign as quickly as possible to limit short-term damages. More importantly, one must realize that the present study limits how the dissemination of information takes place to a single outlet and its publication of one accusation and corrective response. In this environment, participants are introduced to no new messages or counter retaliations during the week between the time they read the corrective article and the time they complete the measures. More than likely, if Chapman Enterprises or Thrill-Ville were to be scrutinized by local citizens and then conduct research countering the claims, the story would unfold over several days with sources and messages appearing in both the print and broadcast media. In this case, PR practitioners would not be afforded the quiet time required for audiences to forget their ties to the organization. The source, and his/her affiliation to the organization, would be mediated daily. This point is raised not to suggest that the time effects are insignificant. Instead, it is meant to simply show that PR practitioners should not rejoice in this study's finding that they are more accepted over time. After all, time passes more quietly for PR practitioners in a research study than it does when an organization is under media scrutiny.

Finally, the design of the study afforded the opportunity to test how message persuasiveness changes after the passage of time. Data revealed that companies using a PR source were perceived as significantly less concerned over time that they were possibly harming people. Additionally, analyses revealed that company-positive research presented by PR sources is viewed less favorably, in comparison to research presented by hired or independent sources, after time has passed. These findings suggest that, although time may improve audience perception of public relations practitioners as suggested earlier, organizations represented by PR sources and organizational actions are seen in a more negative light days after audiences learn of their dilemmas. Likewise, the findings suggest that any positive influence the organizations achieved through the corrective articles begins to dissipate over time. The findings run parallel to other research conducted on the persistence of persuasion (see Cook & Flay, 1978).

Limitations of the Current Study and Directions for Future Research

As with most experimental studies, conclusions based on this research should be drawn with several limitations in mind. In organizational communication, there is some assumption that the key audiences, the ones the organization is most interested in persuading, have a greater than pedestrian interest in the communicative efforts made and thus consume information carefully. Research participants not taking particular interest in stimulus materials could undoubtedly influence results.

Some limitations of the research may also be related to the scenarios chosen for the stimulus materials. The scenarios used in the study were chosen because they both presented a confrontation where accusations could be made followed by corrective responses. In addition, both scenarios revolved around organizations possibly placing people in harm. This facet was important because it allowed for the pitting of citizens against organizations. It was hoped that participants would be more interested in the conflicts if human safety were at stake. The Chapman articles as well as the Thrill-Ville articles provided cases where much room was left for the audience to make a determination about who was in the right. Additionally, the scenarios were chosen because both seemed reflective of common organizational conflict. One can find residents alleging that a local factory is placing their health at risk on nightly newscasts across the country. Likewise, suggestions that amusement parks do not properly protect patrons seem to surface in the media every summer.

Conclusion

This study was designed to test the effectiveness of PR sources, hired sources, and independent sources at relating corrective information during instances of organizational criticism. Findings of this investigation indicate that audiences perceive an organization's own public relations practitioners as less credible than researchers hired by the organization to investigate allegations or independent experts who elect to research the problems on their own. Credibility problems for PR practitioners, however, seem to subside over time.

From an academic standpoint, the results of this study do not provide any uncontestable revelations. Effects were just mixed enough not to merit damning public relations sources. From a practical standpoint, however, organizational communicators have, for the first time, information gathered using realistic materials that should help them guide their practices. At no time were hired sources judged as less effective than either the organization's own sources or independent sources. No suggestion is made here that organizations should pay research firms to uncover favorable findings and then report them to the media. But the research does suggest that if an organization employs a research firm to help it clear its name, there is no need to attempt to filter positive findings through sources that the organization believes the public will view as more unbiased. Ultimately until more research is conducted, practitioners should consider looking for sources outside of the company to help clear the air in the event of crisis.

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Table 1

Source Ratings as a Function of Measure Time

		Measure Time* & Source†					
		Immediate*			Delayed*		
Measure	Article	PR†	Hired†	Ind.†	PR†	Hired†	Ind.†
Source Trustworthiness	Chapman	4.89^{A1}	5.47^{A1}	5.79^{A1}	5.16^{A1}	5.98^{A1}	5.92^{A1}
	Thrill-Ville	5.79^{A1}	6.28^{A1}	6.47^{A1}	6.20^{A1}	6.24^{A1}	6.20^{A1}
	Collapsed	5.34^{A1}	5.88^{A1}	6.13^{A1}	5.71^{A1}	6.11^{A1}	6.06^{A1}
Source Knowledge	Chapman	5.52^{A1}	6.13^{AB1}	6.49^{B1}	5.89^{A1}	6.29^{A1}	6.04^{A1}
	Thrill-Ville	6.56^{A1}	6.72^{A1}	7.03^{A1}	5.96^{A1}	6.68^{A1}	6.20^{A2}
	Collapsed	6.04^{A1}	6.43^{A1}	6.74^{A1}	5.93^{A1}	6.48^{A1}	6.12^{A1}
Source Credibility	Chapman	5.27^{A1}	5.88^{AB1}	6.52^{B1}	5.93^{A1}	6.54^{A1}	5.92^{A1}
	Thrill-Ville	6.08^{A1}	6.82^{A1}	6.91^{A1}	6.65^{A1}	6.41^{A1}	6.28^{A1}
	Collapsed	5.67^{A1}	6.35^{B1}	6.72^{B1}	6.29^{A1}	6.47^{A1}	6.10^{A1}

Note. All comparisons are horizontal. Means are compared within each individual measure time heading as well as within each source. For the source comparisons, means not sharing a superscript letter are significantly different at $p < .05$ by Newman-Keuls test. For the measure time comparisons, means not sharing a superscript number are significantly different at $p < .05$ by t tests.

Table 2

Issue and Company Ratings as a Function of Measure Time

		Measure Time* & Source†					
		Immediate*			Delayed*		
Measure	Article	PR†	Hired†	Ind.†	PR†	Hired†	Ind.†
Threat Severity	Chapman	6.79^{A1}	6.90^{A1}	6.98^{A1}	6.93^{A1}	7.05^{A1}	7.06^{A1}
	Thrill-Ville	6.37^{A1}	6.07^{A1}	6.67^{A1}	6.58^{A1}	6.80^{A1}	6.20^{A1}
	Collapsed	6.58^{A1}	6.48^{A1}	6.83^{A1}	6.75^{A1}	6.92^{A1}	6.63^{A1}
Harm Likelihood	Chapman	5.83^{A1}	5.47^{A1}	5.59^{A1}	6.25^{A1}	5.82^{A1}	5.72^{A1}
	Thrill-Ville	4.32^{A1}	4.33^{A1}	4.50^{A1}	4.84^{A1}	4.91^{A1}	5.02^{A1}
	Collapsed	5.07^{A1}	4.90^{A1}	5.04^{A1}	5.55^{A1}	5.37^{A1}	5.43^{A1}
Company Contact Safety	Chapman	4.65^{A1}	4.97^{A1}	4.43^{A1}	4.61^{A1}	4.63^{A1}	4.62^{A1}
	Thrill-Ville	6.38^{A1}	6.08^{A1}	6.15^{A1}	5.94^{A1}	6.12^{A1}	5.98^{A1}
	Collapsed	5.52^{A1}	5.53^{A1}	5.29^{A1}	5.28^{A1}	5.38^{A1}	5.30^{A1}
Negative Effect Surety	Chapman	4.52^{A1}	4.70^{A1}	4.69^{A1}	5.16^{A1}	5.05^{A1}	4.78^{A1}
	Thrill-Ville	3.60^{A1}	3.33^{A1}	3.50^{A1}	3.93^{A1}	3.71^{A1}	3.86^{A1}
	Collapsed	4.06^{A1}	4.02^{A1}	4.09^{A1}	4.55^{A1}	4.36^{A1}	4.32^{A1}
Response Appropriateness	Chapman	5.94^{A1}	6.25^{A1}	6.28^{A1}	5.51^{A1}	5.85^{A1}	5.54^{A1}
	Thrill-Ville	6.33^{A1}	6.60^{A1}	6.79^{A1}	6.18^{A1}	6.10^{A1}	6.08^{A1}
	Collapsed	6.13^{A1}	6.43^{A1}	6.53^{A1}	5.85^{A1}	5.98^{A1}	5.81^{A1}
Research Soundness	Chapman	4.53^{A1}	5.22^{A1}	5.38^{A1}	4.51^{A1}	5.57^{B1}	5.58^{B1}
	Thrill-Ville	5.90^{A1}	5.92^{A1}	5.99^{A1}	5.31^{A1}	5.77^{A1}	5.96^{A1}
	Collapsed	5.21^{A1}	5.57^{A1}	5.77^{A1}	4.91^{A1}	5.67^{B1}	5.77^{B1}
Company Concern	Chapman	5.67^{A1}	5.23^{A1}	5.17^{A1}	5.02^{A1}	5.92^{A1}	5.96^{A1}
	Thrill-Ville	6.70^{A1}	5.80^{A1}	6.29^{A1}	5.62^{A2}	6.56^{A1}	6.14^{A1}
	Collapsed	6.18^{A1}	5.52^{A1}	5.73^{A1}	5.32^{A2}	6.24^{B1}	6.08^{B1}
Action Responsibility	Chapman	6.39^{A1}	6.56^{A1}	5.83^{A1}	5.78^{A1}	5.90^{A1}	5.90^{A1}
	Thrill-Ville	6.83^{A1}	6.78^{A1}	6.76^{A1}	5.93^{A1}	6.48^{A1}	6.38^{A1}
	Collapsed	6.58^{A1}	6.66^{A1}	6.29^{A1}	5.85^{A1}	6.19^{A1}	6.14^{A1}

Note. All comparisons are horizontal. Means are compared within each individual measure time heading as well as within each source. For the source comparisons, means not sharing a superscript letter are significantly different at $p < .05$ by Newman-Keuls test. For the measure time comparisons, means not sharing a superscript number are significantly different at $p < .05$ by t tests.

Running head: PR EXCELLENCE: AN INTERNATIONAL PERSPECTIVE

Public Relations Excellence in Alliances and Coalitions: An International Perspective

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Public Relations Excellence in Alliances and Coalitions: An International Perspective

Purpose

A theory of public relations excellence has emerged that views the public relations practitioner as a strategic manager of communications between organizations and their publics (J. Grunig, 1992; Dozier, L. Grunig, & J. Grunig, 1995). Little has been done, however, to apply this theory to international organizations such as political-military alliances and coalitions. Such study would help describe practical roles of alliance public relations managers, evaluate how public communications are managed within these organizations, and contribute to an international perspective of public relations.

The North Atlantic Treaty Organization (NATO) is one of the most prominent examples of an international, political-military alliance. Established by the North Atlantic Treaty on April 4, 1949, NATO is "an association of free states united in their determination to preserve their security through mutual guarantees and stable relations with other countries" (North Atlantic Treaty Organization, 1998). Antecedents of NATO can be traced to World War II, when the president of the United States and prime minister of Britain issued the Atlantic Charter, a declaration outlining post-war ideals. Modern alliances such as NATO are now based on this charter's founding principles, which call for international cooperation, respect for each nation's sovereign rights, and collective defense.

Diplomatic squabbling, financial crises, and more serious military challenges can propel these organizations into deadly international conflicts that often result in enormous political, economic, and human costs. These conflicts therefore create a need for excellent public relations, which can reduce costs by establishing cooperative relationships between these organizations and their strategic publics. For example, Chalmer and Pierce (1998) identified changes in the European security environment brought about by the end of the Cold War. They also cited efforts by NATO to reduce post-Cold War conflicts by establishing cooperative relations with former adversaries:

> Dramatic changes since 1989 have required the North Atlantic Treaty Organization [NATO] to rethink its force structure as well as to reconsider how to maintain the peace and security of Europe. In the strategic vacuum created by the dissolution of the Warsaw Pact, NATO sought to establish cooperative relations with the nations of Central and Eastern Europe. (p. ix)

Beneath alliances are coalitions. These are usually subordinate structures, often military in nature, which are led by these alliances and formed for the specific purpose of carrying out political mandates. Like alliances, they are multinational, often comprised of several dozen nations that contribute military forces or other resources to support the coalition.

Although little has been done to apply public relations theory to international political-military alliances and coalitions, these organizations are well suited for the study of public relations. Their fragile network of member nations and often-politicized missions can complicate the management of internal as well as external relationships. Alliances and coalitions also rely heavily on cooperation and consensus building to construct the unity of purpose that serves as their major source of influence. This cooperation is especially important in regional and international conflict situations that often involve these organizations.

The specific role of public relations managers in international alliances and coalitions is also worthy of study. These practitioners often operate in a complicated communication arena, which they share with political and military leaders, diplomats, negotiators, mediators, news media, and other publics. The communication activities of these actors involve a wide range of communication strategies, from coercion to collaboration, which often overlap. Managed properly, integration of these activities can create excellent communication results, including more effective relationships. Left uncoordinated, however, competing activities and role encroachments can weaken communication efforts, cause confusion, and damage relations.

Well-established social and political science perspectives based on management, decision-making, organization, communication, conflict, negotiation, and mediation theories have often been used to study these organizations and their operations. However, it would be useful, given the potentially lethal and economic consequences of regional conflicts, to more clearly define and understand the role of public relations in managing relationships between these organizations and their strategic publics.

Thus, the purpose of this exploratory study is to examine how public relations theory might apply to international alliances and coalitions. Although no hypotheses are proposed, a single research question is considered: Which principles of the excellence theory in public relations described by J. Grunig (1992) apply to the practice of communication management in international alliances and coalitions?

It is expected that answers to this question will add to the body of knowledge supporting the excellence theory, contribute to the development of a global public relations theory, and generate possible applications for the practice of public relations in international alliances and coalitions.

Conceptualization

Excellence in Management of Public Relations and Communication

A strategic management approach to public relations describes communication excellence in terms of managing relationships between organizations and publics. Some of the antecedents to this approach can be found in studies contributing to a general theory of excellence in public relations (J. Grunig, 1992; Dozier et al., 1995).

The first phase of the excellence study consisted of a comprehensive literature review that integrated many theories from communication, public relations, management, organizational psychology and sociology, social and cognitive psychology, feminist studies, political science, decision making, and culture (J. Grunig, 1992). This phase produced what is believed to be the first general theory of public relations (J. Grunig, 1992, p. 2), which was then empirically tested and revised through a survey of four types of organizations in three different countries (Dozier et al., 1995). J. Grunig (1992) identified seventeen characteristics (p. 28) that define excellence in the practice of organizational public relations.

The study provided strong support for the strategic manager role and a two-way symmetrical model of communication as major components in the excellence theory. For example, J. Grunig (1992) found that "choice of the symmetrical model of communication is the key choice made by effective organizations" (p. 24). The two-way symmetrical communication approach, led by a senior public relations manager working in concert with the organization's dominant coalition, or senior leadership, was deemed to be the most excellent. Research also found this approach to be the most ethical (J. Grunig, 1992, p. 320), the most likely to produce effective relationships (p. 26), and the most likely to build collaborative structures that can help prevent costly conflicts between organizations and their publics (pp. 312-320), thereby contributing both social and monetary value to an organization's bottom line economic performance (Ehling, 1992).

This research has helped develop a normative and positive theory of public relations (J. Grunig & L. Grunig, 1992). This allows, theoretically, an application of relative importance to characteristics of public relations excellence; and, in practice, indicates where to look for excellence in public relations and how to measure it (Dozier et al., 1995). However, there are limitations to this approach. Organizational and public relations theories rely largely on Western models of public relations, and may not extend to other nations or coalitions who hold a different worldview of public relations (J. Grunig, 1992; Dozier et al., 1995; Vercic & J. Grunig, 2000).

J. Grunig (1992) also pointed out that "authoritarian dominant" (p. 320) coalitions often do not use two-way symmetrical communication because they view the yielding of information to their publics as a threat to organizational power. Dozier et al. (1995) observed that the two-way symmetrical approach is not a panacea. They described a "mixed motive" (pp. 47-48) approach that may explain how many organizations and their publics vary their communication strategies, oscillating between use of asymmetrical and symmetrical approaches, depending on situations and desired outcomes:

> Advance practices combine two-way communication with negotiation and persuasion. Short-term asymmetrical tactics can be used to stake out more advantageous positions within the larger context of mutually beneficial

relationships. Ethical communicators always subordinate asymmetrical methods to broad principles of symmetrical purpose. (p. 104).

Public Relations as Relationship Management

Scholars have been exploring a relationship paradigm for nearly two decades (Ferguson, 1984, in Ledingham & Bruning, 2000, p.xiii; J. Grunig, 1992; Dozier et al., 1995). This approach takes the study of public relations beyond individual units of organization and publics, and interpersonal activities such as communication. It focuses, instead, on the management of strategic *relationships* between organizations and publics as a public relations responsibility. This is a useful approach when trying to distinguish between various roles and responsibilities in organizations.

Relationship management has also been defined in terms of specific value to organizations. L. Grunig, J. Grunig, and Ehling (1992) found that public relations contributes to an organization's effectiveness by building long-term relationships with strategic publics.

Moreover, this view is consistent with an organizational perspective, in which organizations are viewed as being linked, and even interdependent, with their strategic publics. In this regard, organizations must manage changing relationships with these publics, internal and external, in order to achieve their strategic goals (Daft, 2000). Spicer (1997) described the responsibility of the organizational public relations practitioner as "linking the organization with its larger environment" (p. 152). To emphasize the importance of managing relationships and communication, as opposed to managing information, Spicer noted, "We do not form relationships with information or data or issues. We form relationships (through the communication process) with stakeholders, with people" (p. 153).

Management of communication and relationships can influence more than an organization's public image. Quality of communication and relationships can also influence economic performance. Van Riel (1995) observed, "new forms of communication" (p. 2) have emerged that are designed to deal with financial management and investor relations. Van Riel (1995) considered these specialized communication activities to be outside the realm of public relations, but L. Grunig et al. (1992) placed responsibility for relationships affected by these communication activities within the domain of the public relations manager. They suggested that public relations "has monetary value" (p. 86) when it opens up new markets, eases constraints, reduces expensive litigation and government regulation, and makes an organization more efficient.

The relationship management concept can be extended further when viewed from perspectives related to theories of interpersonal and organizational communication, social psychology and other disciplines. According to Ledingham and Bruning (2000), "The cumulative effect of this scholarship has been to establish the concept of relationship management as a useful and fruitful perspective for public relations study and education" (p. xiv).

Public Relations as Communication Management

Applying these theories to organizations such as NATO allows these organizations to be viewed as the product of "strategic alliances" in which management is viewed as a communication activity (Pien, 1994, p. 133). Communication is widely accepted as an essential part of public relations excellence and relationship management (J. Grunig & Hunt, 1984; J. Grunig & Repper, 1992; Dozier et al., 1995; Spicer, 1997). Cutlip, Center, and Broom (1987) went so far as to describe communication as the "nub of public relations" (p. 175).

As described in excellence theory, two-way symmetrical communication also promotes effective relationships. Once these relationships are formed, communication is then needed to maintain long-lasting, mutually beneficial relationships. The role of communication is particularly important in cultivating and maintaining these relationships prior to, during, and after crises and conflicts (Coombs, 2000).

Communication is also an essential element within internal dimensions of organizations, such as between leadership and employees. Cutlip, Center, & Broom (1987) stated:

> As part of the larger public relations function, the goals of employee communication are to identify, establish, and maintain mutually beneficial relationships between the organization and the employees on whom its success or failure depends. (p. 315)

This concept has become one of the key characteristics of public relations excellence under the general theory of public relations; and it may help identify, explain, and evaluate communication performance within complex internal organizational networks. For instance, organizations that demonstrated symmetrical internal communication and a participative organizational culture tended to produce more excellent results (J. Grunig, 1992; Dozier et al., 1995).

Public Relations as Conflict Management

The study of public relations and communication management in international alliances and coalitions also requires an understanding of conflict theory, since these organizations are often engaged in deterring and resolving regional and international disputes. This perspective can also help explain how public relations and communication might be managed in conflict situations, and how relationships might be affected.

Many practitioners view public relations as persuasive, asymmetric communication used to control their environment. In contrast, public relations can also be viewed as a symmetrical approach to conflict management (J. Grunig, 1992, p. 310). The symmetrical model is closely aligned with the social-psychological perspective that views communication as an essential element in resolving conflict. Deutsch (1973) defined conflict as existing "whenever *incompatible* activities occur" (p. 10). Communication activity plays a critical role in explaining Deutsch's (1973) social-psychological perspective of conflict, in which:

1. Participants interact socially, based on perceptions and cognitions of others.
2. Participants are influenced by internal expectations of the other's actions.
3. Social interaction is initiated by motives, generates new motives, and alters old motives.
4. Interaction takes place in a social environment.
5. Each participant is part of a complex unit comprised of many interacting subsystems, and can act in a unified way. (pp. 7-8)

Thus, communication and conflict are interdependent, and the establishment of lines of communication becomes necessary to resolve conflict effectively (Roloff, 1987).

Given that communication can serve as a cause of conflict, a symptom of conflict, and a means to resolve conflict (Roloff, 1987), this interdependence "produces relationships and the need for public relations" (J. Grunig & L. Grunig, 1992). Practitioners can then, ideally, manage these interdependent relations in a way that will deter conflict, end conflict, or prevent conflict from escalating. While much of the research in conflict theory focuses on the intrapersonal and interpersonal levels, the interaction of communication and conflict can also be operationalized at the organizational level and within mass publics (Roloff, 1987).

This conflict management approach leads naturally to other relationship management perspectives such as dispute resolution, negotiation, mediation, and conflict management (J. Grunig & L. Grunig, 1992). From this perspective, certain forms of communication (e.g. conversation) can be viewed as "an emergent, improvised, and negotiated activity" (Newell & Stutman, 1989, p. 139), as well as a cooperative activity that can be identified and measured by approaches described in the general theory of public relations (J. Grunig, 1992).

Other scholars have approached conflict management from a systems, social exchange, or power perspective (e.g. Drake, 1993; Huston, 1983). These approaches may help explain the applications of power, influence, or even dominance that Jentleson (2000) conceptualizes in coercive prevention, a form of preventative diplomacy. This is important to the study of alliances and coalitions, as the concept relates to implied use of military power. However, communication used in this regard implies a high concern for the sending organization and low concern for the receiver (Pruitt & Carnevale, 1993).

These communication activities could be symptomatic of poor relationships, or could damage long-term relationships.

J. Grunig and Huang (2000) noted that many studies of interorganizational relationships are dominated by two theories. Resource dependency theory explains how relationships form in response to an organization's need for resources; and exchange theory describes how relationships form around transactions of resources. These theories are useful in explaining conflicts such as regional disputes that arise over limited resources, but they do not address conflicts imposed by an activist or hostile adversary (J. Grunig & Huang, 2000, p. 35).

As stated previously, normative theory (J. Grunig, 1992) suggests that collaborative, two-way symmetrical forms of communication are most effective in resolving conflicts and establishing lasting, effective relationships. J. Grunig and Huang (2000) built on this earlier notion by identifying two broad categories of negotiation strategies:

> These negotiation strategies can be defined broadly as integrative strategies, which are symmetrical in nature, and distributive strategies, which are asymmetrical. In general, we propose that integrative, symmetrical strategies will be more effective in developing organization-public relationships than will distributive, asymmetrical strategies. (p. 38)

This is supported by conflict theory that has found integrative, argumentative, and collaborative strategies to be positively associated with communication competence (Canary & Spitzberg, 1989) and more likely to produce stable relationships (Canary, Cunningham, & Cody, 1998; Infante, Chandler, & Rudd, 1989; Sillars, 1980). However, in practice, even the excellent organizations employ both distributive (asymmetrical) and cooperative (symmetrical) communication tactics (J. Grunig, 1992), depending upon the situation. As mentioned earlier, Dozier et al. (1995), in observing this phenomenon, proposed a situational or "mixed motive" model of communication. This may help explain how organizations operate along a communication continuum, using a combination of two-way asymmetrical and symmetrical communication strategies to deal with a variety of situations (p. 48). It may also explain how strategies such as coercive prevention might be used in concert with more collaborative approaches to relationship management.

Public Information as Power

From a conflict perspective, international alliances and coalitions often resort to verbal (diplomatic) or physical (military) power to influence or dominate adversaries, especially in deadly conflicts. Use of distributive strategies such as military force, or even the use of threats to coerce (Jentleson, 2000), can have harmful effects on relationships. This requires further study, in order to better understand the implications for public relations and communication managers in conflict settings.

Influence can be defined as effects on relationships caused by events in interpersonal or interorganizational relations; power as the ability to achieve desired ends through intentional use of influence; and dominance as use of asymmetrical influence over a broad range of activities (Huston, 1983, p. 169). Within this context, information can be used as an element of power on a national and international scale to deter and resolve conflicts (Clinton, 1998; Combelles-Siegel, 1998; Kirby, 2000; National Defense University, 1996; Offley, 1999; Stephens, 1999; Van Dyke, 1998).

Legitimate, rational, competent, and symmetrical uses of public communication and information as a means to influence behavior have many justifiable antecedents in theories of communication, conflict resolution, and power. But many political and military leaders, even scholars (Combelles-Siegel, 1998), have begun to describe information as a "non-lethal weapon" (p. 146) that can be used to dominate adversaries in conflict. Asymmetrical and potentially unethical uses of public information, whether perceived or real, could undermine the credibility of public information and competency of communicators. It is, therefore, even more important to accurately define credible roles of the public relations practitioner and public information activities in these conflict situations.

In summary, international alliances and coalitions are large, complex, multinational organizations that require strategic management of their public communication programs and excellence in public relations. These communication programs are used to establish and maintain the relationships that are required to sustain and empower these organizations. Furthermore, strategic public communication programs are required to deter and resolve conflicts that often arise within and around alliances and coalitions, thereby threatening their existence. Thus, this paper concludes that public relations theory and related communication and conflict theories will provide a useful framework for studying public relations practitioners and communication management in international alliances and coalitions.

Methodology

Semi-structured, qualitative interviews were conducted with 6 public relations practitioners to gather data about communication, relationship, and conflict management behavior in international alliances and coalitions. This method was selected as the best means to achieve rich, comprehensive, preliminary data from a variety of participants. Interview design helped to produce answers that described and allowed interpretation of public relations practitioner roles, worldview of public relations, communication strategies, and effects of various communication strategies on organizational outcomes. Interpretation of data helped illustrate how communication, conflict, and public relations theories applied to public relations roles and practices in international alliances and coalitions.

Selecting the Participants

Telephone and in-person interviews, each lasting from 30 to 60 minutes, were conducted, in English, with a sample of 6 current and former public relations practitioners. These practitioners were located in U.S. metropolitan areas of Washington, DC, and Norfolk, VA; and in Naples, Italy. All participants had experience serving as public relations officials in international alliances or coalitions. These participants were mid-career to senior-level U.S. military or NATO civilian public relations practitioners. Purposive sampling was used to identify participants with NATO public relations experience who were most likely to provide the depth of information needed to answer the questions under study.

Participants were also drawn from different international locations and organizations in order to help ensure variety in public relations worldviews. These organizations included the North Atlantic Treaty Organization (NATO) alliance, NATO-led coalitions such as the peace implementation force (IFOR) and stabilization force (SFOR) in Bosnia-Herzegovina, and the international force deployed to Kosovo (KFOR).

The public relations managers were middle-aged, held senior positions within the headquarters of their respective organizations, and had several years of experience in public relations. They also held professional status, and they possessed or were working toward advanced educational degrees in a communications field. The sample, which was comprised of 5 males and 1 female from two different countries, provided diversity in gender and nationality of senior public relations managers in these organizations.

My experience in NATO and my professional knowledge of allied operations also contributed to selection of participants. I served as chief of public information for NATO's regional headquarters in southern Europe from 1995 to 1998. I also served as chief of public information for the NATO-led peace implementation mission in Bosnia-Herzegovina from 1995 to 1996. Thus, participants in this study were professional acquaintances of mine. My NATO experience allowed me greater access to NATO participants and contributed to a broader understanding of data that was obtained. I explain possible implications of my relationship with participants in the conclusion section of this paper.

Conducting the Interviews

A general interview protocol was used to conduct interviews. The protocol consisted of 13 sets of open-ended questions. This approach allowed flexibility in adapting wording and sequence of questions during each interview, depending upon situation and context (Patton, 1990, p. 280). Given that these interviews were conducted with different participants, in different geographic locations, through different communication media (e.g. face-to-face interviews and long-distance telephone calls), this protocol offered several advantages (Patton, 1990):

1. Allowed best use of limited time.
2. Provided a systematic and comprehensive approach to collecting data without strictly limiting issues to be discussed.
3. Kept interviews focused but allowed individual expression of thoughts and experiences.
4. Allowed exploration of other topics that emerged. (p. 283)

Participants were provided with background on the study through a pre-interview briefing and post-interview debriefing. All interviews were tape-recorded. Participants provided their informed consent on tape and in writing prior to each interview.

Analyzing the Data

Interviews were recorded and key passages were transcribed to allow for categorization of data according to characteristics of public relations excellence theory. Data were first categorized according to four levels of analysis used by J. Grunig (1992) in the studies of public relations excellence: program, department, organization, and results (p. 28). Data were then further analyzed to determine how specific characteristics of excellence theory described by J. Grunig (1992, p. 28) might apply to the practices described by participants. These characteristics include:

- Strategic management of public relations programs.
- A single, integrated public relations department, separate from marketing, led by a senior public relations manager who reports directly to and has influence with senior leadership.
- Professional knowledge and training in management and symmetrical models of communication.

- Equal opportunity for men and women in public relations.
- An organizational worldview that reflects the two-way symmetrical model of communication.
- An organic structure and participative organizational culture that relies upon symmetrical internal communication systems.
- A turbulent, complex environment with pressure from outside groups that creates a need for public relations.
- Public relations results that meet communication objectives; reduce costs associated with regulation, litigation, and other external pressures; and promote high job satisfaction among employees.

Data obtained from participants were also reviewed to identify themes or trends that might suggest ideas for further study of public relations in these organizations. Finally, responses that were closely associated with questions under study were included in the report of findings to illustrate key points.

Findings

How Principles of the Excellence Theory Applied to Alliances and Coalitions

As expected, public relations practitioners in these international alliances and coalition organizations exhibited many characteristics of excellence within the overall public relations program, within the public relations department, within the organization, and as evidenced by public relations efforts that contributed directly to the organization's communication objectives. There were, however, exceptions that will be explained.

Program Level

Managed strategically. Participants generally described organizations in which the public relations program was managed strategically, in direct support of the strategic goals of the organization. For instance, one U.S. military officer who served in a coalition public relations management position in Bosnia-Herzegovina described the strategic goals assigned to her by her commanding general:

> The objectives were ... number one, to establish and maintain media interest in activities [of the organization] ... number two, to be able to ... use [public relations] to compel compliance from the former warring factions, and then, finally, to address the morale issues of the soldiers.

In response to questions about her public relations role, she added, "My job was definitely as a manager." However, she also acknowledged that many of the public relations staff under her immediate supervision carried out little more than technical, media relations functions.

Another practitioner described duties that required strategic management of personnel and resources, as well as communication programs.

> What [the senior PR person does] first and foremost, I think, is to provide direction to this small staff, and also to ensure that we have an adequate flow of current information within the headquarters organization so that the very limited resources that we have are applied as correctly as possible, to make our communication as effective as it can be, given the limited number of people that we have assigned.

Two practitioners deviated from the strategic management model. They were less experienced in public relations than other participants and they were assigned positions subordinate to the senior public relations manager in their organization. As a result, their primary functions involved technical public information and internal relations duties.

Department Level

Participants generally exhibited most of the characteristics associated with excellent public relations departments. These characteristics are related to organizational structure, types of communication used, relationships with senior officials, professional development, and an equal opportunity climate.

Single or integrated public relations department; and separate from marketing. All participants worked in a single or integrated public relations department, separate from marketing and other public communication functions of the organization. The description provided by a public relations practitioner on the staff of NATO's Supreme Allied Command, Atlantic (SACLANT) in Norfolk, VA was typical of the responses from other participants: "Within the SACLANT headquarters it [the public relations office] is a single, stand-alone office."

Senior public relations person in managerial role; and direct reporting relationship to senior management. Each practitioner served in a managerial role, performing management activities described in excellence theory. These duties included advising and counseling leadership, managing resources, taking responsibility for decisions, and leading subordinate staff members (Dozier et al., 1995). The following response from one U.S. military officer was typical of participants' duties that went beyond communication management:

> A portion of my responsibility and my day does deal with resources and attempting to more adequately, more properly, resource this office ... and a portion of my day is true leadership functions ... ensuring the personal and professional development and well being of the personnel assigned to the office. .

All organizations represented in the participant sample had senior public relations practitioners working in a management role. With two exceptions, all worked directly for the military commander or chief executive of the organization. The exceptions worked in a position immediately subordinate to the senior public relations manager in the organization – their direct supervisor.

Some senior public relations practitioners explained, however, that their organization's formal hierarchy was structured in such a way that they reported administratively to a chief of staff or a deputy to the chief executive. In practice, however, they had an "open door" policy with the chief executive, and it was understood throughout the organization that they enjoyed a close, direct reporting relationship. The public relations manager in Norfolk, VA explained his office's relationship with senior leaders in the Strategic Allied Command, Atlantic organization.

> My chain of command, by the wiring diagram, runs through the chief of staff and the four-star deputy supreme allied commander who is a Royal Navy admiral, to the four-star supreme allied commander. As a practical matter, [the senior public relations official works] directly for the supreme allied commander, the Army four-star, and [the senior public relations official works] to ensure that the chief of staff and the deputy are kept informed.

Another participant described her relationship with her commanding general and other senior officers in Bosnia-Herzegovina:

> The signal that [the commanding general] had sent me was that he was going to be a very involved commander. ... He gave his public affairs officers complete access. He let me be an advisor, a manager of all the public affairs activity, to include all the command information ... [he] brought me in to everything ... I was never excluded from anything.

Yet another participant, with more than 17 years of civilian experience in the public relations office of a senior NATO headquarters in Naples, Italy, described the relationships between his immediate supervisors (senior U.S. military public affairs officers) and their military commanders as close, but dynamic. Of interest is the situational nature of these relationships, which seem to vary according to personalities, management styles, and "chemistry" of the individuals who rotated through those positions every two to three years. As described by this participant:

> He had direct access to the commander, with requirements for coordination with intermediate staff, depending let me say on the personalities of the intermediate staff. We went from full access, to good access, to very good access ... it's not constant ... it depends on personalities: personalities of the commanders and the chief public information officers.

Potential for excellence in public relations. Potential for excellent public relations in these organizations was defined by J. Grunig (1992) as knowledge of symmetrical communication and managerial roles, academic training in public relations, and professionalism in the public relations field. This potential was generally reflected in the responses of several participants.

All participants reflected knowledge of managerial roles, supported by the fact all of the participants were either active duty or retired military officers, with extensive training in leadership and management. All had either advanced educational degrees in a communication or public relations field, formal training at institutions such as the U.S. Defense Information School, or professional status gained through specialization in the public relations field.

Knowledge of symmetrical communication among participants displayed the weakest potential for excellence in public relations. While most responses reflected knowledge and proficiency in public information and two-way asymmetrical approaches to communication, few participants expressed formal knowledge or expertise in two-way symmetrical communication models, in a theoretical sense.

Professionalism below the senior or deputy public relations managers was also weak. Only U.S., Canadian, and a small number of European countries maintain a corps of trained, military public relations professionals needed to fill alliance and coalition posts. One participant, a retired U.S. military officer, observed:

> This was a huge handicap, to be moving into, really, uncharted waters; to be having to deal with an increasing tempo of media interest in what we were doing, and increasing expectations among our leadership as to what we could do; when we really didn't have the personnel with the qualifications to carry on a sound program.

Equal opportunity. Despite the limited sample, there was evidence from data collected that alliances and coalitions exhibit some measure of equal opportunity for men and women in public relations. One of the 6 participants, a female U.S. military officer, served in a senior public relations position with NATO-led peace implementation forces in Bosnia-Herzegovina. The multinational nature of these organizations also ensured high levels of diversity.

Two-way symmetrical model. Just as participants reflected weak, formal knowledge of symmetrical communication, few indicated they used the types of two-way symmetrical communications described in excellence theory. Two of the most senior participants described roles that involved some aspects of the two-way symmetrical approach to communications. But the majority described practices that were more indicative of two-way asymmetrical or public information models of communication.

One participant, a U.S. military officer, served at a NATO coalition subordinate headquarters in Zagreb, Croatia and at the main headquarters in Sarajevo, Bosnia-Herzegovina. He described how public relations management roles varied according to different levels of organization:

> It seemed to me ... at the levels I was involved in, in Zagreb, it was predominantly a press information model. There was some management, but it was mostly technician related, in that we set up press conferences. ... We also did lots of press releases, interviews, hosted media, those types of things that tend to be technician oriented. ... There wasn't as much focus on management, I think for a number of reasons. One, it was a one deep operation. ... When I was in Sarajevo ... I think it was more managerial.

The Strategic Allied Command, Atlantic official described NATO communication activities that were suggestive of two-way symmetric communication with strategic publics. Upon further questioning, however, it appeared that the purpose of gathering information from these publics was designed more to improve the targeting of public information provided by the organization than to address the true *needs* of their publics: "Well, you have to address their needs in order to communicate successfully with them. If you're providing information to a group that they in turn don't see any use for you'll be highly unsuccessful in adequately communicating with them." If this interpretation is accurate, then this communication approach falls short of the two-way symmetric communication model described in theory. This would be consistent with J. Grunig's (1992) observation that "authoritarian dominant" (p. 320) coalitions inhibit use of two-way symmetrical communication.

Furthermore, the response of a U.S. officer with experience in Bosnia-Herzegovina, reported earlier in this paper, described coercive communications that were designed "to compel compliance from the former warring factions." These distributive forms of communication are less likely to achieve excellence in public relations, in theory, than more collaborative, two-way symmetrical communication (J. Grunig, 1992). However, the hostile, post-war environment surrounding this particular coalition may have influenced the selection of this particular communication strategy.

Organizational Level

Responses from participants provided a rich mix of data on worldview, power in the dominant coalition, and organizational culture, structure, and environment. Data reflected a close association with characteristics of excellence theory that relate to worldview, power in the dominant coalition, organizational structure, and turbulence of the environment. However, there were weaker associations with the organizational cultures and internal communication approaches required for excellence.

Worldview of public relations as two-way symmetrical. Public relations practitioners from the United States described a worldview that reflected various models, from two-way symmetrical to public information. Of interest, one participant, an Italian citizen, described a NATO coalition that simultaneously held a variety of worldviews. The multinational nature of membership in the coalition (36 nations), and political pressures of a NATO alliance that operates on the principle of consensus, apparently permitted various worldviews to operate together. For instance, the senior political and military headquarters organizations of the NATO alliance seemed to reflect either a two-way symmetrical or asymmetrical approach to public relations – perhaps influenced by the Western leaders who held the chief executive positions, and the largely political nature of the organizational units at the headquarters level.

In contrast, worldviews within some subordinate military commands in the field suggested a public information or, further down the organization's hierarchical chain, even a press agent approach to communication. Again, selection of communication models seemed to be associated with the nationality of the organizational unit's military leaders (including many from former Soviet bloc countries, the Middle East, and Asia), and the more military nature of the field units. Out of interest in maintaining unity of the alliance or coalition, however, it seems NATO has elected to allow these various worldviews to co-exist as long as they conform to the alliance's basic political guidelines. One participant with extensive NATO experience noted:

> There have been cases where there has been no harmony. The approach has not been the same throughout coalition activities, even vertically, at various levels of command. So, strangely, we have had somehow different, slightly different approaches, in planning for public information.... But also horizontally, you still have different national approaches ... in environments which are dominated, quote-unquote, in a sense that they are in a national framework ... you see the approach taken by that nation influencing the overall approach taken by the organization at that level.

Public relations director has power in or with the dominant coalition. In terms of public relations membership within the dominant coalition, all participants indicated they had some measure of participation or power in influencing decisions of the senior leadership. This participant's response was indicative of a high level of participation and influence in the dominant coalition.

> I felt like I always had a voice, as though it was respected. We did not always agree. But I think I had enough successes early on that I earned his trust and [another general's trust].... I think I had a lot of credibility. And I really have to go back to the support I had from [a colonel] and [commanding general] to make me a hundred percent a part of the team. It made doing my job that much easier.

Organic rather than mechanical organizational structure. Descriptions of the participants' organizations also implied that they were of a mixed mechanical/organic structure, defined in theory as "large in scale, high in complexity" (L. Grunig, 1992, p. 471). As such, J. Grunig (1992) maintained that public relations practitioners in these organizations "enjoy the greatest autonomy, support, and value by top management" (p.

471). This was supported by responses by several participants, including a U.S. military officer:

> Well, I'd say that we have a very high degree of shared understanding for the importance of [public relations] and the prioritization of our activities within the military headquarters, here. Going to the next level, above, which is the political level ... he is exceedingly ... adaptable, and accessible, and supportive leader ... he recognizes the importance of ... communicating with important audiences, publics, and individuals.

Turbulent, complex environment. The environment described by all participants easily fit J. Grunig's (1992) description of a "turbulent, complex environment with activists groups" (p. 28). Without exception, all practitioners described organizations that operated in a highly charged political-military environment. Their parent organizations were prone to many pressures from internal political issues and external threats that including military force, terrorism, and activism. One participant, who led NATO public relations activities in southern Europe during the alliance's first combat operations, described the environment this way:

> The environment was changing rapidly as I arrived .... Where NATO had only just in the previous months committed a force of ships to operate an embargo to observe ships going into the Adriatic ... to be able to report to the United Nations when ships were violating the embargo of trade and weapons going to the former Yugoslavia. The [command] prior to that time had really been almost a country club.

Participative rather than authoritarian organizational culture. Participants described organizations that were highly political and military in structure. As such, these organizations were found to be largely authoritarian in culture, with vertical, hierarchical lines of responsibility and communication. One military officer described a culture that appeared structured, and even constrained, by the travel schedule of the chief executive of the organization.

> Well, the leader ... has a very ... busy schedule that includes a very large amount of travel – primarily travel to Europe, but also travel to Washington and other locations. Given that he's probably out of the building 60 percent of the time, it makes his in-the-office time very structured ... by necessity, he has to have a very structured schedule in order to meet the pressing ... the most pressing ... needs of his office.

This structured organizational culture, while efficient, seemed less likely to produce desired communication results than the participative culture described in excellence theory.

Symmetrical system of internal communication. Due to a weakness in the questionnaire design, respondents were afforded little opportunity to describe specific traits of internal communication systems. Therefore, this characteristic, which can be a useful indicator of public relations excellence, was not observed to a significant extent.

Effects of Excellent Public Relations

Data from responses related to effects of public relations programs yielded inconclusive information on effects of excellent public relations within alliances and coalitions.

Programs meet communication objectives. Most participants indicated their public relations programs generally met communication objectives and contributed to the overall goals of the organization. One participant responded, "Well, I know that they [public relations programs] absolutely influence the organization because events are structured and generally considered for scheduling and execution in a way that allows is to properly report on them either through news media being there or through our generation of public release materials." However, few participants provided any substantive comment to explain *how* their programs influenced the accomplishment of overall organizational goals.

Job satisfaction among employees. In terms of job satisfaction among employees, only two participants provided substantive comment. One military participant, based in the United States, described NATO headquarters, in general, as "a very happy place." With regard to morale in the public relations department, he reported:

> I'd say for the vast majority of individuals it's exceedingly high. The work ... that we do here is recognized and appreciated. And we do get very real-term, real-time feedback and input from both leaders and peers within the organization, here. People are genuinely appreciative of the work that's done here, especially when they consider the very limited resources ... that we have.

Another NATO public relations official, based in Europe, described how the tempo of operations and degree to which public relations employees are allowed to contribute to the overall mission could affect morale within the public relations department:

> When people are engaged and they feel they are contributing to the overall effort, and they are in the picture, they work hard, they are right on the mark, they anticipate problems and they are very active. When, instead, people perceive that they are put behind, they are not in the picture, the organization is not counting that much on them, unfortunately, that further reduces the contribution they can give. Morale goes down particularly if ... somebody perceives that maybe the organization is not doing it the best way or it's not learning enough from past experience, then it's difficult to keep the good spirit ... you see that things could be done better ... so you do it, but without the enthusiasm which would maybe guarantee better results.

Reduces cost of regulation, pressure, and litigation. Participants also provided few details about how their programs reduced the cost of regulation, litigation, and other outside pressures on their organization. However, there is ample evidence in literature outside this study that indicate NATO's public relations programs can reduce cost by helping to resolve conflict (Combelles-Siegel, 1998).

Questionnaire design may have contributed to the lack of data in the latter categories. Questions designed to elicit responses in these areas of public relations effects were placed at the end of the questionnaires, and may have been glossed over as the interviews arrived at their conclusion. Questions may have also lacked sufficient specificity to generate the type of data required for thorough study.

Conclusions

Findings suggested that public relations practitioners play an important role in international alliances and coalitions, especially in settings that involved conflict resolution. Furthermore, public relations roles and practices in these organizations were closely associated with most characteristics of the excellence theory. Public relations programs in these organizations, as the excellence theory described, were managed strategically. From a departmental perspective, public relations programs were organized as a single and separate function, managed by a senior public relations practitioner who reports directly to the dominant coalition, and representative of potential for excellence, equal opportunity, and diversity among its work force. From an organizational perspective, public relations demonstrated power within the dominant coalition, operated in a turbulent environment, and was part of a mixed mechanical/organic structure. Finally, morale among public relations employees appeared high; especially in situations where the public relations department met communication objectives and helped the organization meet its strategic goals.

However, a few organizational characteristics were not consistent with excellence in public relations programs. These characteristics might prevent alliances and coalitions from achieving the highest levels of excellence public relations, but even these exceptions can be explained by the excellence theory.

First, most NATO organizations were found to use public information and two-way asymmetric models as their primary means to communicate with strategic publics. These approaches have been deemed less effective, in theory, than two-way symmetrical approaches in achieving excellence. However, evidence was found to support the theoretical notion that structure and authoritarian nature of these political-military organizations interfered with selection of two-way symmetrical communication approaches. This supports previous research that has found "an authoritarian dominant coalition sees the [two-way symmetrical] approach as a threat to its power" (J. Grunig, 1992, p. 320). Also, data implied that NATO at times adopted more of a mixed-motive or situational model of communication, especially in conflict situations. This model has been described in literature as more representative of how alliances and coalitions might alternate between strategic choices in communication strategies (Dozier et al., 1995).

Second, a two-way symmetrical worldview of public relations was not reported consistently. However, multiple public relations worldviews, including two-way symmetrical, appeared to be operating together, effectively, throughout various levels and units of the NATO organization. Although not supported in theory, NATO seems to have effectively adapted a mixed-worldview approach to their highly specialized operations. This may represent a difference between normative theory described by J. Grunig (1992) and positive theories being tested and developed by case studies (J. Grunig, 1992; Dozier et al., 1995). Furthermore, this may suggest applications for a global perspective.

Limitations

This study was limited primarily by the small sample size. However, this sample size was selected based on a reasonable assumption that it was the minimum number needed to provide adequate coverage of the phenomena being studied (Patton, 1990, p. 186). The size was also considered sufficient for the collection of baseline data that was intended for this exploratory study. The sample size could be increased and additional interviews conducted for the purpose of further study.

Validity of these data was also subject to participants' interpretation of questions and to the interviewer's interpretation of responses. The semi-structured interview design was, by its qualitative nature, subjective. Therefore, results are not generalizable.

However, the purpose of this study was to collect deep, natural data from NATO insiders. Data from this study lead to a richer understanding of public relations and communication management in alliances and coalitions and will support future research. This was the best approach for an exploratory study designed to study dynamic communication phenomena in a single organization.

Finally, my own biases, as a retired U.S. Navy public affairs officer and former NATO chief of public information, could have influenced findings and conclusions. However, professional knowledge gained from these experiences assisted with participant observation and data analysis. Furthermore, the scientific design of the protocol and strict adherence to theoretical principles and literature in the analysis of data should limit the effect of these biases

The limited scope of this study, therefore, prevented sweeping conclusions about roles and activities of public relations managers in international political-military alliances. Nor could any general assumptions be made about how principles of the excellence theory might apply to public relations practices within a broad range of alliances and coalitions.

Suggestions for Future Study

Despite the limitations of this study, data collected for this paper suggested that there is a rich environment for future study of public relations in political-military alliances and coalitions. Their complicated structure, responsibilities in regional conflict, and international setting offer great potential for qualitative and quantitative research in public relations excellence, communication and relationship management, and roles of public relations practitioners in international conflicts.

Data that revealed use of coercive strategies, or even a dual concern approach to communicating in conflict situations (J. Grunig & Huang, 2000; Pruitt & Carnevale, 1993), raises interesting implications for public relations practitioners. Public relations excellence models, including those related to conflict management, rely on symmetrical communication (J. Grunig, 1992). In both conflict and public relations theory, integrative, argumentative, collaborative, and symmetrical communication approaches are most effective in negotiation strategies (Canary & Spitzberg, 1989; J. Grunig & Huang, 2000). Yet, from a political perspective, the coercive, distributive approaches advocated and taken by diplomats, political leaders (Jentleson, 2000), and now even public relations managers within NATO are seen as useful and effective means to resolve conflict in certain situations. Further study is required to understand better how alliances select communication strategies, and how these choices involve public relations programs. For instance, how do coercive diplomatic messages (e.g. threatening communications) affect relationships, as well as the credibility and perceived competence of public relations managers, in and around these organizations? Moreover, what long-term, ethical implications does the integration of coercive communications and collaborative communications have for the public relations profession, in general?

There is also a need to understand more clearly the concept of worldview in multinational organizations, and how a mixed-worldview approach might influence the quality of public relations programs in international alliances and coalitions.

Finally, further study of alliances and coalitions, to include how concepts of mixed-motive communication and mixed-worldviews apply, will contribute to a better understanding of how principles of public relations excellence apply to international organizations, thus extending public relations theory beyond a Western view and contributing to a global theory of public relations.

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PR

Running Head: FRAMING EFFECTS OF GENETICALLY ENGINEERED FOOD LABELS

Framing Effects of Genetically Engineered Food Labels On the Consumers' Attitudes toward Genetically Engineered Foods

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Abstract

Since 1999, the debate over genetically engineered foods has exploded and become a worldwide public relations disaster for the biotechnology industry. One of the hot issues surrounding genetically engineered foods is a concern about mandatory food labeling. Either mandatory or voluntary labeling, whichever is to be required in the near future, has raised imminent and critical questions to public relations practitioners, risk communicators, policy makers, and marketing planners. This study aims to investigate framing effects of genetically engineered food labeling on the public's perceptions of and attitudes toward genetically engineered food products. According to the results of this study, participants perceived differently four types of food labels (e.g., bioengineering, genetic engineering, biotechnology, and genetic modification). The framing effects of four types of labels indicated that participants exposed to "bioengineering" or "genetic engineering" labels showed higher perceived benefits, lower perceived risks, more positive attitudes, and higher purchase intentions than those who are exposed to "biotechnology" and "genetic modification" labels. As we can see in these results, framing of food labels plays a crucial role in shaping consumers' perceptions of and attitudes toward genetically engineered food products. This gives an important practical implication to public relations practitioners, risk communicators, public policy makers, and marketing planners as well.

Introduction

Since 1999, the debate over genetically engineered foods[1] has exploded and become a worldwide public relations disaster for the biotechnology industry. One of the major issues surrounding genetically engineered foods is a concern about mandatory food labeling. Many consumer advocacy groups claim that genetically engineered food labels should be mandatory and have honest, reliable, and accurate information available and comprehensible by consumers (Chess, 1998, Goldman, 2000, Marshall, 1998). Theoretically, these claims seem to make quite reasonable sense, however, they cannot provide any practical and easy-to-implement solutions to this food labeling issue.

Either mandatory or voluntary labeling, whichever is to be required in the near future, has raised several practical questions to government regulatory agencies, the food industry, and to consumer advocacy groups. For example, several terms (e.g., bioengineering, genetic engineering, biotechnology, and genetic modification) indicating the same thing are being used by many different organizations. In this situation, what kind of term has to be used on the label? Specifically, which label is going to be adopted, "it contains ingredients produced using genetic engineering?" or "it contains ingredients produced using genetic modification?" And how would consumers interpret these labels? Would it be seen as what it is – information - or perceived as a warning? How would the terms in the label influence the public's perceptions of and attitudes toward genetically engineered foods? The food industry is framing this issue with "bioengineered foods" or "biotech foods" while consumer advocacy groups connect it with "Frankenstein," and use the term, "Frankenfoods" or "genetically modified foods." In other words, the question, whether framing of the label will affect the public's perceptions of and

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attitudes toward genetically engineered foods, should be considered with careful attention. These issues are critical to the food industry and to consumers because this is a matter of survival for the food industry and the public's health. Also, understanding and examining this issue is imminent and crucial to public relations practitioners, risk communicators, policy makers, and marketing planners.

Therefore, this study aims to investigate the framing effects of genetically engineered food labeling on the public's perceptions of and attitudes toward it. A few studies have examined the public's perceptions of and attitudes toward genetically engineered foods, especially a few theory-based studies. Furthermore, no studies on genetically engineered food labeling and its effects on the public's attitudes have been conducted even though this labeling issue is imminent and important to pubic relations campaigns.

The rest of the paper will be devoted to literature reviews regarding perceptions of and attitudes toward genetically engineered foods and labeling, the effects of food labeling, studies on risk perception, Prospect Theory (Kahneman & Tversky, 1979), and framing effects of food labels. Finally, based on the Prospect Theory, research hypotheses will be posed, and research method and results will be discussed.

Literature Reviews

Current Issues surrounding Genetically Engineered Foods

In the U.S., genetically engineered foods are already very much a part of our lives. Approximately fifty-seven percent of soybean and thirty percent of corn production were genetically engineered to resist pests or herbicides (Goldman, 2000). Sales of genetically engineered seeds soared 130% in 1998 to $2 billion, $1.5 billion of that in the U.S. (Moore & Scott, 1999). More than 65 million acres of genetically engineered crops were expected to be planted in the U.S. in 2000 ("Tell the truth," 2000).

Proponents of the use of biotechnology in the crops and food sector claim that genetically engineered crops and foods have many advantages from modern biotechnology, such as increased production for a burgeoning world population, longer shelf life, improved food quality (taste, nutrition, and appearance), less risk of contamination from bacteria, reduced use of pesticides, reduced pollution, and other potential benefits (Goldman, 2000; Lewis, 1998; Moore & Scott, 1999; Wohl, 1997). However, critics led by environmentalists and consumer advocacy groups contend that genetically engineered foods may increase the natural toxicity or decrease nutrients in some foods, and that additives in genetically modified foods may cause allergic reaction.

More than fifty Consumer advocacy and environmental groups, such as "the Consumer Federation of America," "the Center for Food Safety," "Consumers Union," "Friends of the Earth," "Greenpeace," and "Non-governmental organizations (NGOs)," expressed serious concerns and fears over "Frankenfoods" and demanded freedom of consumer choice, and, therefore, clear and informative labeling as to the presence of genetically engineered organisms in foods (Aubert, 2000; Food fight, 2000; Franz, 2000).

However, from the early days of the debate, U.S. producers of genetically engineered crops and food products have opposed and lobbied against the labeling of genetically engineered foods ("Tell the truth," 2000). They argued that just the presence of a genetically engineered label may cause unnecessary scare and alarm and lead consumers to avoid such foods which might be perfectly safe (Caswell, 2000; Marshall, 1998; Subrahmanyan & Cheng, 2000). With

that consideration, the Council for Biotechnology Information has launched a $50 million campaign to convince Americans that biotech foods are safe. ("Biotech foods considering safe," 2000; Stone, 2000).

Today, labeling of genetically engineered foods, whether is mandatory or voluntary, has become the issue which government regulatory agencies and the food industry should deal with proactively and strategically. Under the current situation of contention and high scientific uncertainty, the public is rarely aware of and understand issues of genetically engineered foods (Bredahl, Grunert, & Frewer, 1998; Consumer Reports, 1999; Gallup Polls, 1999; Hoban, 1997, 1998; Hoban and Katic, 1998). Perceptions and attitudes of a less informed public on genetically engineered foods are subject to be affected according to how the issue is framed and represented by various communicators.

Perceptions of and Attitudes toward Genetically Engineered Foods

A few studies have examined the public's perceptions of and attitudes toward genetically engineered foods. Furthermore, inconsistent results have been reported. Most research conducted by scientists and genetically engineered food manufacturers concluded that the public has positive perceptions of and attitudes toward genetically engineered foods, while most research conducted on behalf of consumer advocacy groups supported the public's negative perceptions of and attitudes toward these (Scholderer et al., 1999). These inconsistent research results seem to be attributable to the questions used in the surveys. Examination of the survey brings our attention to the fact that most surveys conducted on behalf of the manufacturers' asked questions using "biotechnological foods" or "bioengineered foods" rather than "genetically modified foods." Consumer advocacy groups preferred the wording, "genetically modified

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foods" to "biotechnological foods." The term, "biotechnological foods" or "bioengineered food" appears to refer to foods produced by using modern advanced technology to increase health benefits. By comparison, the term, "genetically modified foods" looks like "Frankenfoods" produced by alternating original genes into artificial and unnatural organisms, which increase the public's perception of risk.

As these inconsistencies show, the public's acceptance of genetically engineered foods may depend upon terms to be used to frame this issue. There have been many studies that have investigated attitudes toward genetically engineered foods, but few studies examined the effects of framing of labels on the attitudes. It is assumed that the choice of terms on the genetically engineered food labeling may affect the public's attitudes and acceptance of genetically engineered foods, and in the long run, the life or death of the biotechnology industry.

Affection and Genetically Engineered Food Labeling

Previous studies on general food labeling have usually examined the relationship between consumers' cognitive elements (e.g., knowledge and understanding), usage, and decision making (Brecher et al., 2000; "Food labels benefits consumers and dietetics professionals", 1999; Glascoff, 2000; Neuhouser, Kristal, & Patterson, 1999). Unlike studies on general foods labeling, studies on genetically engineered food labeling, however, should focus more on consumers' risk perception and emotive attributes than cognitive aspects. Consumers who are not familiar with genetically engineered food products and uncertain about the consequences of consuming them, consumers may be influenced more by peripheral factors than by the quality of the product itself. Under this uncertain situation, the effects of food labels may be enormous on consumers' decision making if consumers interpret the label as a warning or feel fear when they

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read a genetically engineered food label. In this sense, the effects of genetically engineered foods labeling on consumers' attitudes should be examined from the perspectives of risk communication.

A few studies examined consumers' attitudes toward genetically engineered foods in terms of risk perception (e.g., Frewer, Shepherd, and Sparks, 1994; Sparks et al., 1994; Wohl, 1997). Sparks et al. (1994) found that perceived benefits, perceived risks, perceived needs, and perceived improvements in the quality of life are significant determinants of attitudes toward genetically engineered foods. Generally, perceived risks can be considered to influence attitudes negatively, while perceived benefits can be assumed to influence attitudes in a positive direction. Standard economic theories predict that the consumer would choose the product if the gain in benefits outweighs what must be forfeited with the consumption of the new product (Wohl, 1997). Under the uncertain situation of the consequences of consuming food products, consumers' perceived benefits and risks are likely to be affected by how genetically engineered food products are framed. One of the theories that may well explain consumers' decision making under the uncertain situation can be the Prospect Theory proposed by Kahneman and Tversky (1979). This theory seems to be a very useful framework to investigate the effects of framing as well as its sequential consumers' decision making, especially, under highly uncertain and risky situations.

Prospect Theory and Framing Effect

Kahneman and Tversky (1979) developed the Prospect theory as an alternative theory to the Expected Utility theory (von Neuman & Morgenstern, 1944) of decision making under risk. According to the Expected Utility theory, decision makers want to maximize expected utility, which is obtained by the perceived benefit or subjective value of some outcome (v) multiplied by the probability (p) of that outcome's occurrence (Hicks, 1985). The expected utility theory posits that people make a rational decision by choosing the option that has the greatest sum of expected utilities (Hicks, 1985). However, not all of its predictions appear to be completely consistent with observed behavior. Various researchers and theorists found that people do not always have the time, ability, or effort to behave in a rational manner as described by the expected utility theory. In addition, they found that even though people have the time, ability, and desire to act in a rational manner, they still violate the expected utility theory, especially in making decisions when potential losses exists (Hicks, 1985). These empirical inconsistencies in the Expected Utility theory led Kahneman and Tversky (1979) to develop the Prospect theory as an alternative theory.

At the heart of the prospect theory is that the decisions people make under risky situations will differ systematically depending on the way in which the situation is framed or presented to the decision makers. In other words, when people evaluate risky options or prospects, they make their decisions in terms of potential gains or losses from some reference point, such as current wealth or health, not as final states of wealth or health (Hicks, 1985). The way in which a message is presented can affect the decision maker's placement of the reference point, and subsequently it determines whether the outcome is perceived as a gain or a loss (Hicks, 1985).

Specifically, Kahneman and Tversky (1979) argue that people will choose a sure gain over a chance at some larger gain but will choose a chance at some large loss rather than accept a certain smaller loss. This leads to risk aversion in the gain domain and risk-seeking in the loss domain. In addition, the prospect theory suggests that displeasure associated with a loss is greater than the pleasure associated with a gain of equal objective magnitude.

Overall, this theory generates an important implication for understanding how the framing of message can affect people's perceptions and decision making. Tversky and Kahneman (1983) emphasized the impact of framing on decision making behavior in the Prospect theory. They suggested that, in addition to the use of terms such as "survival or monetary gain" and "morbidity or monetary loss," "labeling" can also induce the frame effect by manipulating the relative attractiveness of options (Tversky & Kahneman, 1983).

For instance, Thaler (1980) showed that lobbyists for the credit card industry insisted that any price difference between cash and credit purchases should be labeled as a "cash discount" rather than as a "credit card surcharge." The two labels frame the price difference as a gain or as a loss respectively; they implicitly mean that the former has lower price and the latter has a higher price as compared to normal. Since losses appear larger than gains, according to the Prospect theory, consumers are less likely to accept the word, " credit card surcharge" than the word, "cash discount." Furthermore, Tversky and Kahneman (1983) suggest that people evaluate an advantageous aspect of an option as gain and a disadvantageous aspect as loss.

Considering the inconsistent current usage of the term for genetically engineered food (e.g., bioengineered foods, genetically engineered foods, biotechnology foods, and genetically modified foods), as shown in previous studies, each label is assumed to have different framing effects on consumers' risk perceptions and purchasing intention of genetically engineered foods. As Kahneman and Tversky (1979) argued, it is assumed that people are more likely to show positive attitudes and purchase intention when the food label is framed as a gain rather than framed as a loss under a highly uncertain situation where no other chance of getting a larger gain exists. In other words, if a product's label implies advantageous aspects, which is in a gain frame, consumers may perceive benefits rather than risk and are likely to have positive attitudes

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toward and purchase intention of the product. On the other hand, if a product's label is framed as a loss, suggesting disadvantageous aspects, then consumers' perceived risk may overweight their perceived benefits so that they are less likely to have positive attitudes toward the product and less likely to buy it.

In this study, the framing effects of currently used terms, bioengineering, genetic engineering, biotechnology, and genetic modification, on the public's perception of risk and attitudes are investigated. Even though these four terms indicate the same ways of producing food products, they may imply different connotations, which leads to different framing effects on the public's perception of risk and attitudes toward products. Framing effects of these terms seem to be brought up by specific words such as "engineering," "technology," and "modification." So in this study, framing effects of these three words will be examined.

At first, "engineering" can be defined as "the application of scientific principles to the optimal conversion of natural resources into structure, machines, products, systems, and processes for the benefit of humankind" (Encyclopedia Britannica, 1998, p. 496). The term, engineering, implies advantageous aspects of science to a human's well-being. Based on the definition, the terms, "bioengineering" and "genetic engineering," which are accompanied by the same term, "engineering" can be defined as the application of engineering principles and equipment to the biological and genetic sciences. This term connotes the positive aspects of engineering and specifically includes the development of machines for medical treatment (e.g., heart-lung machines) and instruments for monitoring biological processes.

"Technology" is defined as "the systematic study of techniques for making and doing things" (Encyclopedia Britannica, 1998, p.440). According to this definition in the Encyclopedia Britannica (1998), the connotation of "technology" seems to focus on "the means" by which man seeks to change or manipulate his environment," while the connotation of "engineering" may imply "the process" by which man seeks for the optimal and desirable human living conditions. Therefore, we can assume that the currently used term, biotechnology, may be less positively framed than "bioengineering" and "genetic engineering."

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When it comes to the term, "genetic modification," this term can be assumed to be framed the most negatively compared with the other three terms, bioengineering, genetic engineering, and biotechnology. Because the word, "modification" is defined as a word meaning manipulation, alternation, and variation. "Genetic modification" seems to be perceived as the manipulation of genes in artificial and undesirable ways, which threatens or is hazardous to human health. Thus "genetic modification" seems to be framed as a loss rather than a gain.

Based upon these notions, we propose that "bioengineering" or "genetic engineering," "biotechnology," and "genetic modification" are framed from the most positive (framed as a gain) to the most negative (framed as a loss) in order.

Given these notions, the following hypotheses will be examined.

Hypotheses

H1: Respondents who are exposed to the label of "bioengineering" or "genetic engineering" will show higher perceived benefit than those who are exposed to the label of "genetic modification."

H2: Respondents who are exposed to the label of "bioengineering" or "genetic engineering" will show lower perceived risk than those who are exposed to the label of "genetic modification."

H3: Respondents who are exposed to the label of "bioengineering" or "genetic engineering" will show lower perceived uncertainty than those who are exposed to the label of "genetic modification."

H4: Respondents who are exposed to the label of "bioengineering" or "genetic engineering will show more positive attitudes than those who are exposed to the label of "genetic modification."

H5: Respondents who are exposed to the label of "bioengineering" or "genetic engineering" will show higher purchase intention of the product than those who are exposed to the label of "genetic modification."

Method

Participants

Fifty eight undergraduate students from Michigan State University participated in the study voluntarily. They were recruited from a communication class with exchange of extra credit. Twenty five out of 58 were seniors (43.1%), twenty were juniors (34.5%), twelve were sophomores (20.7%). 65.5% of the participants were female students and 34.5% were male students. The average age was 21. 91.2% of the participants were White, 7% were Black and others are Asian/Pacific Islander, Native American, and Chicano/Hispanic.

Design

In order to examine the framing effects of three types of label (bio or genetic engineering, biotechnology, and genetic modification), three label conditions independent group design was employed. In this study, tomato soup was chosen as a type of product to test these labels'

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framing effect. The reason that food labels were made to this specific product is that consumers seem to be ignorant of genetic engineered food products, so they will find it difficult to imagine the types of products and even more to explain their purchase intentions. So, we assumed that the predictive validity of studies on consumers' attitudes and purchase intentions with regard to genetically engineered food products may be greatly strengthened by focusing on a specific product.

Procedure

The experiment was conducted on March 20 and March 22, 2001. One of three types of survey questionnaires (see Appendix) was randomly distributed to participants. It took approximately 10-15 minutes for students to complete questionnaires. Students were told that the purpose of the study was to find out college students' opinion about general consumer products and their labels. After reading one of three types of labels, subjects were asked to complete questionnaires asking their perception of and attitudes toward the product. All responses were treated confidentially and analyzed on a group basis.

Instruments

Perception toward food labels: It was measured by questions asking their positive/negative affection, favor, labels' implication of good quality, and fear about labels: favor (e.g., "I like this label"), positive/negative affection (e.g., "I feel positively toward the label that I've read"), label's implication of good quality (e.g., "I think this label implies that this product may have good qualities"), scare (e.g., "I think this label scares me"), and fear (e.g., "I felt fear when I read this label"). 5-point Likert type scale anchored from strongly disagree to strongly agree was used.

Risk perception of labeled products. Based upon previous studies on risk perception (e.g., Frewer, Shepherd, and Sparks, 1994; Sparks et al., 1994; Wohl, 1997), three dimensions (perceived benefits, perceived risk, and perceived uncertainty) of risk perception were examined in this study.

The perceived benefits were measured by items for benefits of product quality and economic benefit. The perceived benefit of a product's quality is composed of four items: taste, freshness, environmental benefit, and health. In addition, the perceived economic benefit of a product is measured by a statement, "this product costs a little/a lot." These five items were aggregated to make an index for perceived benefits. Cronbach alpha for perceived benefit is .64.

Perceived risk is composed of three items such as, "The risk of consuming this product probably is low/high," "The risk of getting disease as a consequence of consuming this product probably is low/high," "This product probably is safe/unsafe." These three items were aggregated to make an index for perceived risk and its Cronbach alpha is .82. In addition to perceived benefit and perceived risk, perceived uncertainty was measured with a statement, "the consequence of consuming this product probably is certain/uncertain." These items were measured by 5-point Semantic Differential Scales.

Attitudes toward labeled products and purchase intention. Attitudes toward the product is composed of 5 items (e.g., favor, good, acceptable, happy, and credible). The five items were aggregated to make an index for attitudes and its Cronbach alpha is .91. Purchase intention was measured by "I am likely to buy the product." 5-point Likert type scale anchored from strongly disagree to strongly agree was used.

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Other variables: In addition, variables such as familiarity with and knowledge about the terms, source of information regarding genetically engineered foods, label reading behavior, perceived product's prevalence on the market, and perceived necessity of genetic engineering (or bioengineering, biotechnology, and genetic modification).

Perceived necessity was measured by twelve items: needs for improving taste, lowering price, protection from insect damage, long self-life, overall product improvement, fewer pesticide applications, productivity, improving the quality of life, health enhancement, economic improvement, environmental protection, and well-being for future generations. These twelve items were aggregated to make an index for perceived necessity and its Cronbach alpha is .90. Perceived product's prevalence on the market ("to what extent do you think products in grocery stores contain ingredients produced using 'genetic engineering'?") is measured. 5-point Likert type scale was used.

Results

Descriptive Statistics

Familiarity with and knowledge about the terms: Overall, 44.8% of participants said they had frequently heard about the terms (e.g., bioengineering, genetic engineering, biotechnology, and genetic modification). However, 75.9% of them were not knowledgeable about the terms.

Source of information. The most popular sources of hearing about the terms were TV (53.4%) and professors (53.4%). And they also heard from newspapers (44.8%), magazines (36.2%), friends (25.9%), internet (20.7%), radio (15.5%), and family (12.1%).

Label reading behavior: Most participants (48.2%) said that they read a product label when they buy a product.

Perceived product's prevalence on the market: 39.7% of participants said that they think the average product in grocery stores contain ingredients produced by using genetic engineering (or bioengineering, biotechnology, or genetic modification) (M=3.12, SD=1.14).

Perceived necessity: Generally, participants seem to think that the terms (e.g., bioengineering) are needed for improving product's taste, price, protecting from insect damage, long shelf-life, overall product improvement, fewer pesticide applications, productivity, quality of life, health enhancement, economic improvement, environmental protection, and the well-being of future generations (M=32.87, SD= 9.91, range from 12 to 51).

Perception toward food labels

Regarding liking of the labels, there were significant mean differences among labels, F(2,55)=1.05, p>.05, η^2= .04. (See Table 1). According to Table 1, participants liked the "engineering (bio/genetic)" label the most (M=2.46, SD=.74), followed by "genetic modification" (M=2.14, SD=1.17), and "biotechnology" (M=2.06, SD=1.12).

Table 1
The Mean Difference of Liking of Food Labels

Group	Count	Mean	Standard Deviation	Standard Error	
Bio/Genetic engineering	28	2.46	.74	.14	
Biotechnology	16	2.06	1.12	.28	
Genetic modification	14	2.14	1.17	.31	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p = .357
Between Groups	2	1.970	.985	1.050	
Within Groups	55	51.616	.938		
Total	57	53.586			

In addition, participants felt most positively (M=2.54, SD= .79) about the "engineering" label, followed by "biotechnology" (M=2.06, SD= .85), and "genetic modification" (M=1.71, SD= .99). The mean differences are significant at .05 level, F(2,55)=4.56, p < .05, η^2=.142. (See Table 2). According to Scheffe's post hoc test, there was statistically significant mean difference between "engineering" label and "genetic modification" label (p<.05).

Table 2
The Mean Difference of Positive Feeling about Food Labels

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	28	2.54	.79	.15	
Biotechnology	16	2.06	.85	.21	
Genetic modification	14	1.71	.99	.27	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p < .05
Between Groups	2	6.758	3.379	4.56	
Within Groups	55	40.759	.741		
Total	57	47.517			

When it comes to the implication of quality on labels (See Table 3), participants tend to think that the "engineering" label implies a good quality (M=2.64, SD=.91) more than "biotechnology" (M=2.19, SD=.98), and "genetic modification" (M=2.07, SD=1.0). The mean differences are not significant, F(2,55)=2.132, p > .05).

Table 3
The Mean Difference of Quality Implication of Food Labels

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	28	2.64	.91	.17	
Biotechnology	16	2.19	.98	.25	
Genetic modification	14	2.07	1.0	.27	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p > .05
Between Groups	2	3.861	1.930	2.132	
Within Groups	55	49.795	.905		
Total	57	53.655			

In a similar fashion, as previously found, participants thought the "genetic modification" label scared them the most (M=3.85, SD=1.21), followed by "biotechnology" (M=3.25, SD=1.24), "engineering" (M=3.0, SD=1.18). However, the mean differences are not significant

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at .05 level, F(2,53)=2.173, p>.05. T-test was done to test mean difference between "genetic modification" and "engineering," and it was significant at .05 level, t(38)=2.109, p<.05.

There was significant mean differences for feeling fear toward labels, F(2,55)=6.75, p < .01, η^2= .20 (See Table 4). Participants felt fear toward the "genetic modification" label the most (M=3.36, SD=.93), followed by "biotechnology" (M=2.75, SD=1.0), "engineering" (M=2.18, SD=1.02). According to Scheffe's post hoc test, significant mean difference was found between "engineering" and "genetic modification" (p<.01).

Table 4
The Mean Difference of Feeling Fear about Food Labels

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	28	2.18	1.02	.19	
Biotechnology	16	2.75	1.00	.25	
Genetic modification	14	3.36	.93	.25	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p < .01
Between Groups	2	13.334	6.667	6.75	
Within Groups	55	54.321	.988		
Total	57	67.655			

Hypotheses Tests

Hypothesis 1: Analysis of variance was used in order to compare mean differences of perceived benefits among three labels. Respondents exposed to the label of "engineering" showed higher perceived benefits (M = 19.17, SD=2.81) than those who were exposed to the label of "genetic modification" (M=18.14, "SD=3.37) and "biotech" (M=17.81, SD=4.30). However, the mean differences of perceived benefits among three labels are not statistically significant, so hypothesis 1 was not supported.

Table 5.
The Mean Difference of Perceived Benefits among Four Labels

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	28	19.17	2.81	.53	
Biotechnology	16	17.81	4.30	1.07	
Genetic modification	14	18.14	3.37	.90	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p > .05
Between Groups	2	22.086	11.043	.949	
Within Groups	55	640.259	11.641		
Total	57	662.345			

Hypothesis 2: The mean difference of perceived risk among three labels was compared by analysis of variance. Respondents exposed to the label of "engineering" showed the lowest perceived risk (M = 6.51, SD=2.80) than the other respondents exposed to other labels. Respondents exposed to the label of "genetic modification" showed the highest perceived risk (M = 9.92, SD=2.78) more than the other respondents exposed to other labels. The mean differences among three labels were statistically significant, F(2,54) = 6.68, p < .01, η^2= .20 and hypothesis 2 was supported. According to Scheffe's post hoc test, there was significant difference between "engineering" and "genetic modification" (p<.01).

Table 6.
The Mean Difference of Perceived Risk among Four Labels

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	27	6.51	2.80	.54	
Biotechnology	16	7.81	2.92	.73	
Genetic modification	14	9.92	2.78	.74	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p < .01
Between Groups	2	107.402	53.701	6.68	
Within Groups	54	434.107	8.039		
Total	56	541.509			

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Hypothesis 3. The mean differences of perceived uncertainty were not statistically significant *according to Table 7. Hypothesis 3 was not supported. Generally, respondents tended* to perceive the labeled products as being uncertain of the consequences of consuming products.

Table 7.
The Mean Difference of Perceived Uncertainty among Four Labels

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	28	2.29	1.08	.20	
Biotechnology	16	2.38	1.02	.26	
Genetic modification	14	2.21	.89	.24	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p >.05
Between Groups	2	.196	9.79	.093	
Within Groups	55	57.821	1.05		
Total	57	58.017			

Hypothesis 4. According to the result from the analysis of variance, hypothesis 4 was not supported, F(2,55)=2.59, p>.05. However, Table 8 shows that respondents exposed to the label of "engineering" showed the higher positive attitudes (M = 15.14, SD=3.52) toward the labeled products more than those who were exposed to the other labels. And respondents exposed to the label of "genetic modification" showed the lower positive attitudes (M = 12.28, SD=4.59) toward the labeled products than those who were exposed to the other labels. T-test was done to see the mean difference between "engineering" and "genetic modification," and it was significant at .05 level, t(40)= -2.24.

Table 8.
The Mean Difference of Attitudes toward Labeled Products

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	28	15.14	3.52	.66	
Biotechnology	16	13.62	3.98	.99	
Genetic modification	14	12.28	4.59	1.22	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p >.05
Between Groups	2	79.895	39.948	2.59	
Within Groups	55	848.036	15.419		
Total	57	927.931			

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Hypothesis 5. Respondents exposed to the label of "engineering" showed higher purchase *intention of the product (M = 2.86, SD=1.21) than those who were exposed to other labels.* Respondents exposed to the label of "genetic modification" showed lower purchase intention of the product (M = 2.14, SD=.86) than those who were exposed to other labels. The mean differences of purchase intention among three labels were not statistically significant and Hypothesis 5 was not supported, F(2,55) = 2.053, p > .05. (See Table 9). However, according to t-test to see the mean difference between "genetic modification" and "engineering," there was significant mean difference between them, t(34)= -2.199, p<.05.

Table 9.
The Mean Difference of Purchase Intention of Products

Group	Count	Mean	Standard Deviation	Standard Error	
Engineering(Bio/Genetic)	28	2.86	1.21	.23	
Biotechnology	16	2.81	1.17	.29	
Genetic modification	14	2.14	.86	.23	
Source	D.F.	Sum of Squares	Mean Square	F ratio	p > .05
Between Groups	2	5.196	2.598	2.053	
Within Groups	55	69.580	1.265		
Total	57	74.776			

Discussion

According to the results of this study, the framing of food label has an influence on consumers' perception of and attitudes toward genetically engineered food products. Participants perceived three types of food labels (e.g., bio/genetic engineering, biotechnology, and genetic modification) differently. In general, participants liked more and felt more positively toward food labels with "engineering" label than the other two labels, 'biotechnology' and "genetic modification" labels. Also, they thought of "engineering" label as implying better quality than the other two labels. Furthermore, participants were less likely to feel fear about "engineering" label than "biotechnology" and "genetic modification" labels. Based on the results, we can assume that "engineering" labels are perceived as a gain framing, while "genetic modification" as a loss, and "biotechnology" in the middle of gain and loss.

In this study, the framing effects of labels seemed to influence participants' risk perception, attitudes, and purchase intention of genetically engineered food products. According to the results, even though all hypotheses were not statistically significant at .05 level, the overall pattern of framing effects of the three types of labels in perceived benefits, perceived risk, attitudes, and purchase intention indicated that participants exposed to "engineering" labels showed higher perceived benefits, lower perceived risk, more positive attitudes, and higher purchase intention than those who are exposed to "biotechnology" and "genetic modification" labels.

As we can see in these results, framing of food labels seemed to play an important role in shaping consumers' perceptions of and attitudes toward genetically engineered food products. This gives an important practical implication to public relations practitioners, risk communicators, public policy makers, and marketing planners as well. Whichever frame of labels, once taken by proponents or critics, its frequent usage in communication messages for public relations campaigns or marketing will exert a different influence on the public's perception of and attitudes toward this issue. Indeed, this will result in a rise or fall of the biotech industry as well as benefits: blessings or hazards to the public health.

However, the main limitation of this study is that the results of this study may not be generalized to the general public because subjects were college students who do not have high monetary power and are not the major decision makers in food consumption for their family. So, their level of involvement in the genetically engineered food issue might be low, which might affect their attitudes toward or purchase intention of the genetically engineered food products in this study.

In addition, specific characteristics of participants, such as level of knowledge and involvement about the issue, communication behavior, and media usage pattern, should have been investigated in greater depth, which may provide more practical guidelines for marketing and public relations campaigns.

Another limitation is that only one food product was chosen for testing framing effects of the labels in this study. Testing more product categories with three labels is needed to generalize the findings of framing effects.

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Endnote

[1] The term, genetically engineered foods, is transposable with biotechnology foods, bioengineered foods, or genetically modified foods. In this study, genetically engineered foods, will be used for convenience.

CO-ACCULTURATION IN A KOREAN MANUFACTURING PLANT IN MEXICO

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ABSTRACT

CO-ACCULTURATION IN A KOREAN MANUFACTURING PLANT IN MEXICO

This paper addresses intercultural manager-worker communication relationships in a large Korean electronics manufacturing facility (Samsung International Inc.) across the United States–Mexico border in Tijuana. To study the unique symmetrical host-stranger relationships (Mexican workers reporting to Korean managers in a Korean company based in Mexico), the researchers explicated and tested a new theoretical framework—co-acculturation. The model employs acculturation theory and the coorientational measurement model. The study used cultural dimensions as the objects of manager–worker coorientation.

Sixty Korean managers and 195 Mexican workers responded to a group-administrated survey. Findings indicated that (1) the cultural measures deduced from previous theory did not work as reliable measures for studying co-acculturation, and (2) hypothesized relationships between time and frequency of intercultural contact and co-acculturation indices—agreement, congruency, accuracy, and co-acculturation states—were not supported. The researchers recommended that future research employ a longitudinal design in order to track changes over what appears to be a dynamic and stressful interactive process of reconciling cultural differences in the work setting.

CO-ACCULTURATION IN A KOREAN MANUFACTURING PLANT IN MEXICO

> *When individuals leave the familiar surroundings of their own social groups and enter another culture, the rules governing behavior and communication frequently undergo comprehensive alteration. (McDaniel and Samovar, 1997)*

Globalization has become an effective and powerful strategy for companies to grow and prosper. Corporations become multinational by expanding into new markets abroad or by acquiring existing companies in other countries. For example, Germany-based Siemens Group expanded beyond Europe to compete in Asian and U.S. wireless communication markets, and Daimler (Mercedes-Benz) purchased Detroit's Chrysler to form DaimlerChrysler. Other companies become global enterprises by moving production "off-shore" to countries with lower labor costs, as did Nike when it opened 12 factories in Asia. Still other companies lower distribution costs by opening plants closer to markets in other countries. BMW-Bayerische Motor and Toyota Motor set the pace for other European and Asian automobile manufacturers when they opened plants in the U.S.

Doing business in the new global economy has created new kinds of organizations. It is now commonplace, for example, for multinational companies to include two or more cultures under a single corporate umbrella. Not surprisingly, manager-worker communication presents new challenges for both those directly involved and those charged with building and maintaining relationships within and outside the organization—the public relations staff.

This case study focuses on intercultural manager-worker communication relationships in a large manufacturing plant in an industrial park in Tijuana, Mexico, owned by Korean multinational Samsung International Inc. Although only one multinational corporation is studied, mangers and workers were sampled from each of Samsung's three operating companies.

The Setting: Samsung Tijuana Park—a Maquiladora

There are more than 1,000 multicultural companies along the U.S.–Mexico border area of Tijuana that employ more than 250,000 workers. The plants, called "maquiladoras," typically assemble products for export to other countries, including goods worth more than $2.5 billion annually to the United States (Linquist, 2000).

Most maquiladoras are U.S.-owned, but many investors come from other countries, including Japan, South Korea, Germany, and Canada. The two largest border cities in Mexico—Tijuana and Ciudad Juarez—have grown rapidly from small tourist towns to become industrial "boomtowns." Migration due to the lure of jobs has pushed the population growth rate in Tijuana, for example to an average of 5.4 percent per year—almost three times Mexico's population overall growth rate of 1.7 percent per year (Dibble, 2000).

The Samsung Tijuana Park maquiladora is part of the Samsung Group, a large South Korean business conglomerate (called a "chaebol")—with close ties to the Korean government—founded in 1938. Samsung Tijuana Park, established in 1996, began as a manufacturing complex producing electronic components, color television sets, VCRs, computer monitors, and tuners. The number of Mexican workers doubled between 1997 and 1999, and Samsung Tijuana Park ranked as the second largest maquiladora in Tijuana (Patta, 1999). In 2000, there were 100 Korean managers and 6,500 Mexican workers.

At least three different national cultures, a unique regional culture, and Samsung's corporate culture affect the organizational culture at Samsung Tijuana Park. Figure 1 shows Samsung Tijuana Park's multicultural environment. The area's "border culture" represents a unique culture because it reflects the area's nearness to the United States—influenced more by U.S. culture than are other Mexican cities more distant from the border. As people move to Tijuana for jobs in maquiladoras, they encounter cultures different from their own. Intercultural communication scholars refer to the adjustment process they experience as "acculturation."

(INSERT FIGURE 1 HERE)

Korean managers and Mexican employees represent the two primary cultures at Samsung Tijuana Park. In this multinational corporate setting, managers and workers are cultural strangers; each group with its own patterns of cognitive, affective, and behavioral structures and processes. Because of such cultural differences, multinational companies face unique manager-worker relationship problems, compared with companies operating in their home settings.

For example, there can be problems in training new employees and in communication between managers and workers. Cultural differences can interfere with the integration of new workers and cause high turnover. Therefore, success or failure of multinational companies cannot be measured by economic factors alone. Effective intercultural communication and mutually beneficial relationships between cultural groups, especially manager-worker relationships, also are significant indicators of successful operation of multinational companies in the global economy.

Research Questions

The goals of this research were to develop and pilot test a theoretical framework for examining relationships between managers and workers in a multicultural, multinational company. The focus is on communication relationships associated with adjusting to different cultural values in multicultural work settings. The research questions that give direction to the study include the following:

1. Within multinational companies, how do managers and workers with different cultural backgrounds perceive and understand other's cultural attitudes, values, and behaviors?

2. To what extent do managers and workers recognize and accept each other's cultural values?

3. How do manager-worker relationships adjust over time to accommodate and adapt to cultural differences?

The theoretical framework for exploring these questions combines a process model of acculturation and a measurement model of communication relationships.

Theoretical Foundations

> *Cultural values are individual characteristics, but they have implications, both for the kinds of collective political, economic, and social institutions individuals create and for the aggregate effects of individual behavior. (Stevenson, 1997)*

> *Disequilibration, the unsettled feeling of being out of balance in some way, is a common experience for all of us, and it is not surprising that it has been a recurrent metaphor for theories of human behavior. (Chaffee and McDevitt, 1997)*

According to Gudykunst and Kim (1984), "the culture of our youth provides a common pattern for our cognitive, affective, and behavioral structures and processes, so that persons belonging to the same culture tend to have a similar understanding of, and similar responses to, reality" (p. 225). Accordingly, encountering strangers from different cultures can bring surprises and stresses attributable to the cultural gap. Hofestede (1991) also emphasized that encountering a stranger's culture may arouse "unintended conflicts" (p. 208).

When people encounter a new language, as well as physical and psychological dimensions different their own culture, they feel "acculturative stress" (Berry, Kim, & Boski, 1987, p. 74). This stress prompts them to adjust and adapt to the new culture in order to survive and work together.

Acculturation

Many terms have been used to describe the stress and change when one encounters someone from a different culture: acculturation, assimilation, integration, adjustment, and adaptation—to name only those most commonly used. Acknowledging slight difference among these concepts and their inconsistent use by researchers, Kim (1988) suggested an integrated concept—"cross-cultural adaptation"—defined as:

> The process of change over time that takes place within individuals who have completed their primary socialization process in one culture and then come into continuous, prolonged first-hand contact with a new and unfamiliar culture (pp. 37-38).

Hazuda et al. (1988) defined a similar term— "acculturation—as "a multidimensional process resulting from intergroup contact in which individuals whose primary learning has been in one culture take over characteristic ways of living from another culture" (p. 690).

Acculturation, then, is a multidimensional process of change resulting from intergroup contact in which individuals who were initially socialized in one culture encounter and learn another culture. Change is motivated by the "disequilibration" (Chaffee and McDevitt, 1997) felt when the participants in intercultural recognize differences—even conflicts—that affect their interactions and attempts to achieve common goals.

Communication plays the central role in the acculturation process. Communication provides the basic means by which individuals develop knowledge and understandings in their new cultural environment. Sapir (1931) pointed out that "every cultural pattern and every single act of social behavior involves communication in either an explicit or implicit sense" (p. 78). Consistent with a systems theory perspective, Kim (1988) viewed cross-cultural adaptation as a dynamic communication process. She described adaptation as "how individuals undergo adaptive changes through their continuous communication with the cultural environment" (p. 40).

The Acculturation Curve

Hofstede (1991) posited a four-step acculturation process through which an expatriate or a migrant encounters a new cultural environment. The first step is a period of "euphoria"—the excitement and anticipation of traveling and of seeing new lands. This is followed by a period of "culture shock," stresses and surprises experienced when real life or work starts in the new cultural environment. The third step of "acculturation" occurs as one learns to function under the new conditions, adopts some of the local values, finds increased self-confidence, and becomes integrated into a new social network. The last step in the process represents the "stable state" when the expatriate overcomes the previous culture shock.

The last stage can be one of three conditions: (1) It may remain negative—"compared to home"—if the visitor continues feeling alien and discriminated against. (2) It may be "just as good as before," in which the visitor has become "biculturally adapted." (3) Or, it may be even better, in which the visitor has gone "native," becoming "more Roman than Romans" (pp. 209-210). Figure 2 shows this acculturation curve.

(INSERT FIGURE 2 HERE)

The duration of each phase varies from situation to situation. Hofstede (1991) posited two sequences depending on the length of the expatriation period. On short assignments of three months or less, expatriates quickly move through the three phases (euphoria-culture shock-acculturation). On long assignments of several years, people experience culture shock (phase two) for a year or more before acculturation (phase three) starts.

Cross–Cultural Stress

Cross-cultural adaptation (Kim, 1988) explains the acculturation process as a "stress-adaptation-growth" dynamic sequence. According to Kim and Gudykunst (1988; Kim, 1988; Gudykunst & Kim, 1992), stress—sometimes referred to as "culture shock"—occurs when an individual whose images, maps, and rule structures developed in one cultural milieu is forced to contend with the maps, images, and rule structures of a second distinctive culture or subculture. This leads to stress—conflict or disequilibrium.

A person—as any open system—has an inherent drive to diminish internal disequilibrium in the face of stress caused by changes in his or her environment. To regain internal equilibrium and reduce stress, a person adapts. In the process of adaptation, a person grows internally, with those who experience the greatest stress being the ones who adapt most effectively to their new cultural environment (Gudykunst & Kim, 1992, pp. 250–252). Stress and growth are inseparable aspects of adaptation.

Chaffee and McDevitt's (1997) theory of "disequilibration" posits more than cognitive change or adaptation, however. Their concept of stress is similar to Stinchcombe's (1968) "external tension" that initiates structural change and activities to reduce or remove the stress (p. 12). In cross–cultural situations, rejecting or accommodating cross-cultural stress results in stable states similar to those in the final phase of Hofstede's acculturation curve.

Disequilibration theory also explains why people initiate communication in cross-cultural relationships. Communication is the major mechanism through which relationships adapt and adjust to external environmental change pressures, as well as to stress produced within the context of the relationship. Other authors concerned with the nature of relationships have concluded: (1) that over time, social interactions lead to mutual changes in accents, speech rates, vocal intensity, gestures, gaze, and other cultural-based behaviors (Cappella, 1991, p. 104); (2) that communication is the major means through which people both pursue and service relevant relationship functions (Burleson, 1995, p. 576); and that relationships eventually reflect the conjoint, purposive behaviors of the actors in the relationships (Broom, Casey & Ritchey, 2000, p. 15). Cross-cultural relationships, then, ultimately reflect the effects of communication and interaction over the time.

(INSERT FIGURE 3 HERE)

Host-Stranger Relationships

Much of acculturation research presupposes host-stranger relationships. The main interest is the stranger's acculturation to a host culture. According to Gudykunst and Kim (1985), acculturation is the "continuous process by which strangers are resocialized into a host culture, so as to be directed toward a greater compatibility with or fitness into the host culture" (p. 209).

Kim's (1988) theory limited its focus to:

> The adaptation of individuals without specifically dealing with possible changes that occur in the host environment. The dominant culture of the host society controls the life activities of individual immigrants and sojourners, which necessitates adaptation of the individuals, not vice versa (p. 37).

However, this presupposition of fixed host-stranger relationship has limitations for explaining the multi-acculturation processes in multinational organizations in the global context. For example, host-stranger relationships are easily identified when the host multinational organization is located in the host nation. If Company A in Nation A has immigrant workers from Nation B, then the host culture is National culture A and Nation B immigrant workers are "strangers." Managers in Company A represent the host culture socially and organizationally. Immigrant workers from Nation B, however, are always strangers both socially and organizationally. Under these conditions, managers are not strangers and workers are not hosts.

However, the host-stranger relationship is quite different if the host organization is not located in its home nation. For example, if Nation A's Company A is located in Nation B and hires resident workers from Nation B, then host-stranger relationships can be interchangeable. The expatriated managers in Company A are strangers in Nation B, and the resident workers represent the host culture. In contrast, the resident workers from Nation B are strangers to Company A's Nation A culture, represented by Company A managers. When on the job, workers often find themselves "strangers" in an organization shaped by a different national culture.

In summary, when an organization from one country is located in another country and hires resident workers, host-stranger relationships between expatriated managers and resident workers are not one-way and fixed (asymmetrical), but two-way and dynamic (symmetrical). Symmetrical host-stranger relationships require a different approach to explaining the acculturation process from the usual asymmetrical host-stranger relationships. Therefore, this study employs the imagery of and concepts from the coorientation measurement model.

(INSERT TABLE 1 HERE)

Coorientational Consensus

According to Scheff (1967), there have been two main traditions in the study of consensus. One tradition follows the "individual agreement" definition for consensus; the other is "coorientational consensus."

In the individual agreement definition of consensus, "the degree of consensus on issue X would simply be the extent to which individuals in the group state their agreement with X" (p. 33). Johnson (1990) explained this as "the similarity of aggregated individual opinions and values" (p. 247). Broom (1977) concluded that most public opinion polling and research employ the individual agreement tradition. He added that this consensus is "an artifact of the summation of responses that does not take into account the respondent's expectations of relevant others in the social milieu" (p. 41).

On the other hand, coorientational consensus is "a social systemic model of consensus, rather than an individual-systemic model as assumed by the individual agreement definition" (Scheff, 1967, p. 33). The basic assumption of coorientation is that people's behavior is not based simply on their private cognitive construction of their world; it also is a function of their perception of the orientations held by others around them (Mcleod & Chaffee, 1973). Chaffee

(1973) differentiated between the two approaches to consensus as follows: "Social phenomena are largely based on micro-level, not on individual, events. That is, a society is not composed of many persons (atoms), but of many interpersonal relationships (molecules)" (p. 466).

Coorientation studies examine consensus from the perspective of interpersonal perception. "True consensus" occurs when people actually agree on an issue and accurately perceive that agreement. "Dissensus" occurs when there is actual disagreement that is also accurately perceived. "False consensus" happens when people think they agree, although they actually do not. In contrast, "false conflict" occurs when people actually agree, but they think they do not (Broom & Dozier, 1990; Cutlip, Center & Broom, 2000).

Newcomb (1953), the first to use the term "coorientation," provided the rationale for the coorientation approach: "Communication among humans performs the essential function of enabling two or more individuals to maintain simultaneous orientation toward one another as communicators and toward objects of communication" (p. 393). Coorientation (simultaneous orientation) refers to the interdependence of A's attitudes toward B and toward X, and vice versa. Therefore, the coorientational definition of consensus means that there are simultaneous orientations between persons (A-B) regarding the same object (X). Most importantly, the relationships between individuals (orientation toward each other) significantly influence each other's perceptions of an issue. In this regard, coorientational consensus is a relational concept different from individual agreement.

Coorientational Variables

Agreement is the comparison of one person's view with another's on the same object or issue. It is the degree to which two or more people hold the same summary evaluation of an issue. Mcleod and Chaffee (1973) described this similarity as "cognitive overlap." Understanding, on the other hand, represents the degree to which two people share a common definition of the object or issue, regardless of their evaluations of it. They made a distinction between salience (person's summary evaluation on one object—used in calculating the agreement dimension) and pertinence (discrimination between two objects based on a single common attribute—used in calculating the understanding dimension).

Congruency is the comparison of a person's view with his or her estimate of another's view on the same issue. In other words, congruency represents "perceived agreement"—the similarities between a person's own cognitions and the same person's estimation of another's cognitions. As Chaffee and Mcleod (1968) pointed out, congruency is not truly a coorientational (interpersonal) concept. Rather, it is an intrapersonal concept, although it exists only in coorientational context.

Accuracy represents the similarity between one person's estimate of what another thinks about an object or issue, and what the other actually thinks about the object or issue. Accuracy represents the degree of similarity between person A's estimate of person B's cognitions of object X and B's actual cognitions of X—and vice versa. Accuracy is a critical dimension in the coorientational model because it is a truly relational concept that cannot be experienced solely by person A or B. Figure 2 shows Mcleod and Chaffee (1973) coorientation measurement model.

(INSERT FIGURE 4 HERE)

Co-acculturation in Multinational Organizations

Whereas acculturation and adaptation theories deal mainly with expatriates' or immigrants' cultural stress and adaptation to new culture, coorientational consensus suggests a framework for examining simultaneous acculturation processes in multinational organizations. In multinational organizations composed of expatriated managers and resident workers who have different cultural backgrounds, each group acculturates in a multicultural setting in which the host is stranger, and at the same time, the stranger is host. There is no fixed host culture.

In this context, "co-acculturation" can be defined as simultaneous orientation toward each other and cultural dimensions. Co-acculturation combines and extends concepts derived from acculturation theory and the concept of coorientational consensus. Co-acculturation is not one individual's or one group's acculturation to a fixed and given host culture, or the sum of each group's acculturation. Rather, it represents mutual acculturation and relational acculturation.

Co-acculturation cannot be explained by only intrapersonal acculturation theory. The co-acculturation perspective posits interactive interpersonal relationships as significant units of analysis in the acculturation process. Table 2 summarizes the conceptual dimensions of acculturation, coorientation, and co-acculturation.

(INSERT TABLE 2 HERE)

Cultural as the Object of Coorientation

Inkeles and Levinson (1969) defined national culture as "relatively enduring personality characteristics and patterns that are modeled among the adult members of society" (p. 428). They added that national culture includes concepts regarding relations of the self with society, authority, and gender, as well as accepted ways for dealing with conflicts, aggression, and expression of emotions.

According to Harris and Moran (1991), organizational culture can be explained as the way people work for the organizations with regard to reality, truth, and work. Schein (1985) defined organizational culture as a "basic pattern of assumptions—invented, discovered, or developed by a given group as it learns to cope with its problem of external adaptation and internal integration" (p. 9). Hofstede (1991) also defined organizational culture as "the collective programming of the mind which distinguishes members of one organization from another" (p. 180).

The organizational culture of a multinational company is assumed to represent a mixture of different national cultures. The mixture is not the sum of different cultures, however, but a culture different from the originals. However, as Adler (1991) observed, organizational culture is highly correlated with national culture. That is, the characteristics of national culture are strong influences on organizational culture, although organizations may have cultural characteristics not affected by, or sometimes totally different from, national culture. Although expatriated managers' and resident workers' cultures cannot completely represent each national culture, each group's acculturation to a multinational organization will be significantly affected by how they simultaneously acculturate to the other's national cultures.

During manager-worker interaction, each cultural group is simultaneously oriented—coorientation—to characteristics of the other's national culture and common organizational culture. Frequently cited dimensions of cultures include "high-low context" (Hall, 1976), and "power distance," "uncertainty avoidance," "individualism-collectivism," and "masculinity-femininity" (Hofstede, 1980; 1983).

High-low context. Hall (1976) defined a high-context culture as one in which "most of information is either in the physical context or internalized in the person, which very little is in the coded, explicit, transmitted part of the message" (p. 79). When facing the difficulties in organizations, high-context people are likely to depend upon mediated methods such as third parties, instead of confronting the problems directly. Accordingly, they tend to be more implicit in their communication behavior and less concrete in their messages than are low-context people.

In contrast, a low-context culture is one in which "the mass of the information is vested in explicit code" (p. 79). Low-context people prefer direct communication styles and explicit messages.

Power distance. According to Hofstede (1983), "power distance is the extent to which the members of a society accept that power in institutions and organizations is distributed unequally" (p. 83). In high power-distance cultures, subordinates are dependent on bosses.

Mostly in paternalistic structures, boss-subordinate relationships become hierarchical. Subordinates in high power-distance organizations are unlikely to approach and contradict their bosses directly.

In low power-distance cultures, subordinates are not dependent on bosses and boss-subordinate relationships are based on consultation; there is interdependence between bosses and subordinates. Because the perceived status distance between them is small, subordinates are willing to approach and contradict their bosses.

Uncertainty avoidance. Hofstede (1980) defined uncertainty avoidance as "the extent to which the members of a culture feel threatened by uncertain or unknown situations." Uncertainty avoidance is indicated by "rule orientation, employment stability, and stress" (p. 153). This dimension also includes willingness to take risks in their work or future.

In high uncertainty-avoiding cultures, there are many formal laws and informal rules controlling the rights and duties of managers and workers. Rules satisfy an emotional need for formal structure. People like to work hard, or at least to be busy. Life is hurried, and "time is money."

In contrast, low uncertainty-avoiding cultures reject formal rules. Rules are established only in cases of absolute necessity. There is little anxiety. People are able to work hard if there is a need, but they are not driven by an inner urge for constant activity.

Individualism vs. collectivism. Individualism posits a preference for a loosely connected social framework in which individuals take care of only themselves and their families. In contrast, collectivism represents a preference for a tight social framework in which individuals expect extended families—relatives, clan or other group members—to take care of them in compensation for absolute loyalty (Hofstede, 1983).

In individualistic cultures, relationships between manager and worker represent a contract based on mutual advantage. Hiring and promotion decisions are supposed to be based on skills and rules only. Management is individualized and task needs prevail over relationships.

In collectivist cultures, manager–worker relationships are perceived in moral terms, similar to family linkages. Managers consider employee group affiliations when making decisions about who is hired and who is promoted. Management is group-oriented and relationship needs prevail over task accomplishments.

Masculinity vs. femininity. In organizations, this dimension is the "relationship between the perceived goals of the organization and the career possibilities for men and women" (Hofstede, 1980, p. 261). The appropriateness of masculine or feminine traits required in specific positions is critical to successful adjustment and promotion.

In feminine cultures, dominant values in society include caring for others. People and warm relationships are considered important, and sympathy for the weak is highly valued. In masculine cultures, dominant values include material success and progress. Accumulation of money and material things is important. Men are supposed to be assertive, ambitious, and tough.

Independent Variables Affecting Co–Acculturation

"Intercultural contact" is the major independent variable in this study of the co-acculturation process. Time and frequency of intercultural contact are the bases for building co-acculturation consensus between cultural groups, as contact presents opportunities to observe each other and to communicate.

Time of intercultural contact. As posited in Hofstede's (1991) acculturation curve, the process evolves through four stages—euphoria, culture shock, acculturation, and stable stage. Kim's (1988) stress-adaptation-growth dynamic is also based on time. Time in this context not only refers to duration, but to the opportunities to be exposed to intercultural interaction and communication. Time of intercultural contact can include length of employment in present multinational organization, length of previous employment in other multinational organizations, and total length of employment in multinational organizations.

Frequency of intercultural contact. Frequency of contact represents how often members of different cultural groups interact. Simply put, interaction provides members of each cultural group opportunities to influence and to be influenced by the other cultural group.

Dependent Variables

Co-acculturation theoretically represents two or more cultural groups simultaneously learning about and adjusting to each other's cultures. Therefore, co-acculturation involves intrapersonal and interpersonal perceptions analogous to coorientational agreement, congruency, and accuracy. Combinations of these provide data for calculating states of co-acculturation similar to the stages of coorientational consensus.

Co-acculturation agreement. Co-acculturation agreement is the comparison of one cultural group's view with the views held by the other culture group toward the same cultural dimensions. It represents the degree to which the cultural groups share similar evaluations of the cultural dimensions. Therefore, co-acculturation agreement indicates the degree of cultural similarity between two groups.

Co-acculturation congruency. Co-acculturation congruency is the comparison of one group's views on the cultural dimensions with their estimates of the other cultural group's views on the same dimensions.

Co-acculturation accuracy. As co-acculturation progresses, members of different cultural groups estimate the other group's perceptions more correctly, meaning that estimates of the other group's views become increasingly similar to the other group's actual views. Theoretically, co-acculturation accuracy could increase from zero to perfect correspondence between one group's estimates and the other group's actual views. Co-acculturation progresses from low accuracy states (false consensus/false conflict) to high accuracy states true (true consensus/dissensus).

Stages of co-acculturation. Hofstede's individual acculturation stages—euphoria, culture shock, acculturation, and stable stage—can be redefined as states of co-acculturation using Scheff's concept of interactive consensus. This transformation represents different combinations of co-acculturation agreement (actual agreement) and co-acculturation congruency (perceived agreement). Co-acculturation hypothetically progresses from false co-acculturation (euphoria) between different cultural groups, through false cultural conflict (culture shock), to true co-acculturation (consensus) or true cultural conflict (dissensus).

In the "false co-acculturation" stage, expatriated managers and resident workers think they agree more on various cultural differences than they actually agree. In the "false cultural conflict" stage, expatriated managers and resident workers think they do not agree on cultural differences, although they actually agree more than they perceive. In the "acculturation" stage, both expatriated managers and resident workers learn about each other and each other's culture and increase their accuracy of the other's views. Each group reaches a "stable stage" of co-acculturation—either "true co-acculturation" or "true cultural conflict." True co-acculturation means that expatriated managers and resident workers actually agree on cultural differences and accurately perceive that agreement. True cultural conflict means that expatriated managers and resident workers actually disagree on cultural differences and they accurately perceive their disagreement. Table 3 illustrates the different states of co-acculturation.

(INSERT TABLE 3 HERE)

Theoretical Hypotheses

This study focuses on two theoretical hypotheses resulting from the co-acculturation theoretical framework:

Theoretical Hypothesis 1. The greater the time of intercultural contact, then the greater the degree of co-acculturation between expatriated managers and resident workers in a multinational organization.

Theoretical Hypothesis 2. The greater the frequency of intercultural contact, then the greater the degree of co-acculturation between expatriated managers and resident workers in a multinational organization.

Research hypotheses deduced from these two propositions were tested in the Samsung Tijuana Park maquiladora using data from group-administered questionnaires.

Methods

The study employed survey methodology to measure the relationships between expatriated Korean managers and resident Mexican workers. Following are descriptions of the research setting and populations, sampling procedures, questionnaire design, data collection, analysis procedures, and the research hypotheses.

Research Setting and Populations

The Samsung Tijuana Park complex includes the manufacturing plants of three companies—SAMEX, SEMSA, and SDIM. The organizational structure is unique, however, because the three companies share a common Samsung corporate culture and report to a centralized management headed a president. SAMEX employs approximately half of the total work force, with the other half about evenly divided between SEMSA and SDIM. This distribution proportions apply to both Korean managers and Mexican workers.

Most of the 100 Korean managers live in the United States. They commute across the U.S.–Mexico border every workday. Most received educational preparation to prepare for work in foreign countries. For example, in the "Samsung Global Expert Program," managers live in a foreign country for a year without other work assignments in order to learn about local culture and language. After they are assigned to a country, Korean managers take another concentrated localization program to improve language skills and to learn about the country's culture. Many of the Korean managers at Samsung Tijuana Park had these educational opportunities before being dispatched to Mexico.

Among the Korean managers, however, there are some "local Koreans"—especially at the assistant manager level. Some were born in Latin American countries—including Mexico. Therefore, they speak both Spanish and Korean. Because local Koreans were initially acculturated in the country where they were born, they learned Korean language and culture from their parents and families. Consequently, their acculturation to Samsung Tijuana Park might be somewhat different from expatriated Korean managers originally acculturated to Korean culture. Local and dispatched Koreans were not differentiated in this study, however, because Mexican workers do not distinguish between these two Korean sub-groups. All are perceived simply as "Korean managers" and both represent the Korean culture in the eyes of the Mexican workers.

Most of Mexican workers work on assembly lines in the three plants. The population of Mexican workers is almost evenly divided between male and female. Although the average unemployment rate in Tijuana is only one percent, the turnover rate is relatively high—seven to ten percent monthly—because of abundant job opportunities. Consequently, some of the Mexican workers at Samsung Tijuana Park have had previous work experience at other maquiladoras, such as Sony, Hitachi, and Hyundai.

The Samples

A total of 255 respondents participated in this study. The samples included 60 Korean managers (60 percent of the population) and 195 Mexican workers (3 percent of the population).

Respondents were selected using purposive sampling in order to accommodate production and work schedules of both managers and workers. The researchers requested that

Samsung's human resources staff use the following standards for selecting the samples: (1) the samples should represent the proportions of the population in the three plants, (2) the sample should represent the gender distribution of the populations, and (3) the sample should represent the range of employment tenure at Samsung Tijuana Park—from beginners to veterans. The samples satisfied these standards, but the actual sampling was performed by human resources department staff, not controlled by the researchers using a probability sampling process.

Data Collection

A group-administrated survey was conducted. The research team collected data in two different plant locations. Korean managers and Mexican workers from the same plant participated in the survey at the same time in the same room. Korean managers used a questionnaire in Korean and Mexican workers used a questionnaire in Spanish. (Two Korean managers requested questionnaires in English after they reported some difficulty using the Korean language version.)

Korean managers and Mexican workers gathered in the same room to fill out the questionnaire. Although, this arrangement could have affected responses, it was regarded as positive because the questionnaire asked respondents to estimate the views of the other cultural group. The presence of the other cultural group should have helped respondents think about their experience with the other group, thereby facilitating completion of the rather complex coorientational questionnaire.

Researchers wore shirts featuring the university's name and logo in order to make it obvious to respondents that the study was a university research project, not a Samsung effort. The cover sheet on the questionnaire and oral opening statements by the researchers emphasized the voluntary participation and confidentiality of responses. However, the researcher could not control for the unplanned appearance of some high-ranking managers who had guided respondents to the survey room, then observed for a short time to make sure the survey began without problems. Although they stayed only a short while, their presence may have affected respondents in some way. Most likely, the effect was to assure participation.

Questionnaire Design

The original questionnaire was written in English, translated into Korean and Spanish, then back-translated into English by different translators to check against the original English version. The original questionnaire was revised to reduce ambiguity and to reword questions to eliminate differences between the translations and back-translations.

The researchers pretested the questionnaire with a small group of respondents at Samsung Tijuana Park. After the pretest, the researcher and respondents discussed specific semantic and syntactic ambiguity of statements. The translators and back-translators participated in this discussion. The questionnaire was revised to reflect the pretest findings and to not change the original meaning of concepts.

To test co-acculturational relationships, 15 pairs of statements about cultural dimensions probed two different perspectives—"about yourself" and "about the other cultural group." The "about yourself" items represented respondents' own views about the cultural issues. The "about the other cultural group" items represented respondents' estimates of the other cultural group's views about the same cultural issues. Respondents answered these statements using five-point Likert scales. The remainder of the questionnaire asked about respondents' experience at Samsung Tijuana Park, including independent variables—length of employment, frequency of contact with members of the other cultural group, and minimal demographic information.

The questionnaires—Korean and Spanish versions— were the same, with one exception. The item about previous work experience at other maquiladoras was used only in Spanish version because of the stability of the Korean management team, versus the high turnover among Mexican workers.

The five cultural dimensions (three items for each dimension) were worded to describe working at Samsung Tijuana Park. For example, the items for high–low context in the Spanish version included: (1) Mean more than what their words say, (2) Prefer printed materials and bulletin boards rather than talking directly, and (3) Give detailed instructions, not just general guidance on how to work.

The power–distance items dealt with: (1) Hesitate to express opinions different from those of higher management, (2) Follow directions faithfully, and (3) Prefer to work with a manager who provides close supervision.

Uncertainty avoidance items included: (1) See loyalty to Samsung as a virtue and intend to stay with the company, (2) Do not understand (Mexicans/Koreans) because (we /they) are foreigners, and (3) Respect formal organizational lines of authority.

For the individualism–collectivism dimension, items probed: (1) Willingness to sacrifices in one's life to achieve work assignments, (2) Place high value on being part of the Samsung family, and (3) Think individuals make better decisions than do groups.

The masculinity–femininity items dealt with: (1) See differences between men and women in the same jobs, (2) Put more value on recognition and job advancement than on being friendly with others at work, and (3) Prefer a higher salary over flexible working hours.

Calculating the Variables

This study treated co-acculturation accuracy, congruency, and agreement as dependent variables, operationalized as follows:

Co-acculturation agreement. Co-acculturation agreement represents the similarity–difference between the actual views held by Korean managers and Mexican workers. The following formula was used to calculate co-acculturation agreement difference scores:

> Co-acculturation agreement = Group mean of Korean managers' own views – Group mean of Mexican workers' own views

The greater the co-acculturation agreement, the closer the difference score is to 0.0 (zero). The closer the difference is to ±4.0, the lower the degree of co-acculturation agreement.

Co-acculturation congruency. As with accuracy, two congruency indices—Korean managers' congruency and Mexican workers' congruency—were calculated as dependent variables. The following formulas were used to calculate congruency difference scores:

1. Korean managers' congruency = Individual Korean manager's own view – Individual Korean manager's estimate of Mexican workers' view
2. Mexican workers' congruency = individual Mexican worker's own view – Individual Mexican worker's estimate of Korean managers view

The greater the co-acculturation congruency, the closer the difference will be to 0.0 (zero). The closer the difference is to ±4.0, the lower the degree of co-acculturation congruency.

Co-acculturation accuracy. Two accuracy indices (difference scores)—Korean managers' accuracy and Mexican workers' accuracy— were calculated:

1. Korean managers' accuracy = Individual Korean manager's estimate of Mexican workers' views – Group mean of Mexican workers' actual views
2. Mexican workers' accuracy = Individual Mexican worker's estimate of Korean managers' views – Group mean of Korean managers' actual views

The closer the accuracy difference score is to 0.0 (zero), then the higher the degree of co-acculturation accuracy. The closer the difference score is to ±4.0, the lower the degree of co-acculturation accuracy.

Time and frequency of intercultural contact were treated as independent variables:

Time of intercultural contact. Time of intercultural contact was operationalized as both length of employment (in months) at Samsung Tijuana Park, and as total length of employment (in months) at Samsung Tijuana Park and other maquiladoras.

Frequency of intercultural contact. To measure frequency of contact between Korean managers and Mexican workers, respondents were asked how often they have contact with the other cultural group at work and outside work. Frequency was operationalized as a categorical variable with four possible answers—at least once a day, at least once a week, at least once a month, and rarely.

Research Hypotheses

The following research hypotheses represent the consequences and relationships between variables deduced from the theoretical hypotheses:

H1: The longer the length of employment at Samsung Tijuana Park, then the greater the degree of co-acculturation agreement between Korean managers and Mexican workers on each of the cultural dimensions: high–low context, power distance, uncertainty avoidance, individualism–collectivism, and masculinity–femininity.

H2: The longer the length of employment at Samsung Tijuana Park, then the greater the degree of co-acculturation congruency.

H3: The longer the length of employment at Samsung Tijuana Park, then the greater the degree of co-acculturation accuracy.

H4: The longer the total length of employment at Samsung Tijuana Park and other maquiladoras, then the greater the degree of co-acculturation agreement.

H5: The longer the total length of employment at Samsung Tijuana Park and other maquiladoras, then the greater the degree of co-acculturation congruency.

H6: The longer the total length of employment at Samsung Tijuana Park and other maquiladoras, then the greater the degree of co-acculturation accuracy.

H7: The more frequent the contact between Korean managers and Mexican workers, then the greater the degree of co-acculturation agreement.

H8: The more frequent the contact between Korean managers and Mexican workers, then the greater the degree of co-acculturation congruency.

H9: The more frequent the contact between Korean managers and Mexican workers, then the greater the degree of co-acculturation accuracy.

The Findings

The first steps in the analyses were to confirm that the items adapted from Hofstede's indicators of culture consistently measure the intended cultural dimensions, and if not, to determine if the items were measuring other underlying factors.

Reliability of Co-acculturation Measures. The five cultural dimensions were operationalized as 15 items (three for each dimension) in the survey. Cronbach alpha reliability coefficients showed extremely low reliability for the five three-item cultural dimensions (high-low context, $\alpha = -.05$, n=246; power distance, $\alpha = .15$, n=245; uncertainty avoidance, $\alpha = -.01$, n=246, individualism and collectivism, $\alpha = .42$, n=248; and masculinity and femininity, $\alpha = .06$, n=248). The alphas indicate that the five sets of three items did not work consistently to measure the hypothesized cultural dimensions.

To find other common factors or cultural dimensions, the 15 items were submitted to factor analysis. Varimax rotation factor analysis produced four factors (11 items) and two stand-alone items. The factors were subsequently subjected to Cronbach reliability analysis. Alpha coefficients were improved, but still not uniformly reliable (factor 1, $\alpha = .51$, n=246; factor 2, $\alpha = .48$, n=247; factor 3, $\alpha = .46$, n=247; factor 4, $\alpha = .36$, n=245).

(INSERT TABLE 4 HERE)

The researchers the conducted factor analysis of the 15 items by cultural groups—Korean managers and Mexican workers—to learn if the factor loadings would be different for each cultural group. Again, four factors and two stand-along items were extracted for each cultural group, but the combinations of items were different for Koreans and Mexicans. Alpha coefficients for Koreans' responses were significantly improved using these new factors, but only one factor was judged to be sufficiently reliable (factor 1, α =.86, n=59; factor 2, α =.64, n=59; factor 3, α =.56, n=.59; factor 4, α =.45, n=60). For Mexicans' responses, alpha coefficients were improved, but again still below acceptable levels (factor 1, α =.38, n=193; factor 2, α =.47, n=187; factor 3, α =.48, n=187; factor 4, α =.32, n=186).

(INSERT TABLES 5 AND 6 HERE)

Based on the results of the confirmatory reliability tests and factor analyses, the 15 cultural dimension items were treated as 15 independent objects of co-acculturation.

Test of Hypotheses. Pearson correlation was used to test for relationships between the hypothesized impact of time of employment on the degree of co-acculturation—co-acculturation agreement, co-acculturation congruency, and co-acculturation accuracy.

Among Korean managers, positive relationships between time of employment at Samsung Tijuana Park and co-acculturation agreement were detected toward 14 of the 15 cultural measures. However, only two relationships are statistically significant at the .05 level: "Hesitate to express different opinions from those of higher management" (r= -.32, sig.<.05), and "prefer a higher salary over flexible working hours" (r= -. 36, sig.<.01).

For the Mexican workers, positive relationships between time of employment at Samsung Tijuana Park and co-acculturation agreement were found for eight of the 15 cultural measures. Only one relationship, however, was statistically significant ("no difference between men and women in the same jobs," r= -.22, sig.<.01).

In the sample of Korean managers, positive relationships between time of employment at Samsung Tijuana Park and co-acculturation congruency were found for 12 of the 15 cultural measures. However, only three relationships met the .05 level of significance ("mean more than what words say," r= -.29, sig.<.05; "follow directions faithfully," r= -. 27, sig.<.05; and "prefer a higher salary over flexible working hours," r= -.29, sig.<.05).

For the sample of Mexican workers, positive relationships between time of employment at Samsung Tijuana Park and co-acculturation congruency were detected for five of the 15 measures. However, only one relationship was statistically significant (follow directions faithfully, r= -.18, sig. <.05).

Among Koreans, positive relationships between time of employment at Samsung Tijuana Park and co-acculturation accuracy were detected for 12 of the 15 cultural measures. Only two relationships were statistically significant at the .05 level ("follow directions faithfully," r= -.32, sig.<.05, and "put more value on recognition and job advancement than on being friendly with others at work," r= -. 30, sig.<.05).

For Mexican workers, positive relationships between time of employment at Samsung Tijuana Park and co-acculturation accuracy were detected for six cultural measures, but only one relationship was statistically significant ("follow directions faithfully," r= -.25, sig.<.01).

Total time of employment (number of years and months of employment at Samsung Tijuana Park and other maquiladoras combined) was applied only to Mexican workers. Pearson correlations between total time of employment and co-acculturation outcomes showed no significant relationships between total time of employment and co-acculturation agreement and congruency. There was, however, a significant positive relationship between total time of employment and co-acculturation accuracy on one item ("give detailed instructions, not just general guidance on how to work," r= -.25, sig.<.05).

Frequency of intercultural contact was dichotomized into daily contact and less frequent contact (weekly, monthly, and no contact). Again, surprisingly, there were no significant relationships between frequency of contact and co-acculturation agreement, congruency and accuracy.

Concluding Comments

The most obvious finding from the Samsung Tijuana Park study was evidence that the cultural items adapted from dimensions explicated by Hofstede and Hall did not cluster as hypothesized, and that they worked differently for Korean managers and Mexican workers. Simply put, the cultural dimension items were not reliable measures of cultural views within or between the two cultural groups, at least as operationalized in this study.

Secondly, time (as length of employment) and frequency of cross-cultural contact had no statistically significant impact on the co-acculturation indices. The evidence did not support the hypothesized impact of length and frequency of cross-cultural communication on changes in the states of manager-worker relationships—co-acculturation. Again, however, the findings represent only this set of operationalizations applied in the Samsung Tijuana Park setting.

The questions then become: Is there a problem with the theory? Or, is there a problem with the methods used in this study? To be sure, this was a case study of the co-acculturation process in only one cross-cultural organization, but the consistency of findings is surprising, given the body of literature and previous studies of related concepts and theory. Previous research suggesting strong theoretical linkages between cross-cultural communication and the outcome states of co-acculturation led to the hypotheses tested at Samsung Tijuana Park. The findings were surprisingly consistent, but in an unanticipated way.

The evidence failed to support any of the hypotheses, even when the 15 items used to calculate the co-acculturation indices were used as separate variables. This means that each hypothesis was tested 15 times, by each independent variable, by each cultural group. The effect of this multiple-tests strategy yielded consistent evidence of no support for the hypothesized relationships between the cross-cultural contact and co-acculturation. So, maybe there are problems in trying to extend acculturation theory to examine co-acculturation in a multi-national organization.

On the other hand, maybe the problem is in how the study was conducted and how the concepts were operationalized. Surely, the sampling of the two cultural groups was not done in such a way as to produce probability samples. With 60 of the 100 Korean managers in the sample, and with apparent full cooperation from the human resources department in meeting our sampling criteria, the prima facie evidence suggests that sampling is not the real problem. Although the samples may not be truly representative of the two populations, if the hypothesized relationships were there to be found, the evidence should have reflected them. In this case, sample representativeness is a greater threat to external validity than it is to internal validity.

Maybe the items did not capture the real variance in the two populations. After all, the Chronbach alphas and factor analyses demonstrated that the items were not consistent measures across the two cultural groups, and that the items were not internally consistent with the cultural dimensions from which they were derived. In fact, after conducting these confirmatory analyses, the 15 items were used as individual variables in multiple tests of the hypothesized relationships. This unplanned change in analysis strategy was used after discovering that the items were not consistent measures of the theoretical underlying cultural dimensions and admitting a serious measurement problem—unreliable measures.

Chaffee and McDevitt (1997), however, argued that the usual measure of reliability, while defensible in educational testing, may not apply when the variables being measured are subject to "disequilibration" (p. 21). They explicated their position as follows:

> The disequilibration-and-restablization process has not been considered when statistical evaluation models from other domains such as personality and ability testing are applied uncritically to communication research. The difference between the two domains of human activity is critical not only to theory, but to method. We do not expect such underlying individual difference traits as intelligence to be disequilibrated; decades of research have shown them to be quite stable over time and across situations. But for

> communication behavior and its effects, instability should be expected and it should not be confounded with reliability estimates. When it is, and we suspect this is often the case, researchers run the risk of underestimating the reliability of their measures in published reports (p. 24).

For now, we are entertaining the possibility that co-acculturation represents such a case of instability. Co-acculturation may represent an unexpectedly dynamic process in response to stress produced when persons from two or more cultures must reconcile their values and behaviors in order to achieve and maintain productive relationships. And for the future, we suggest that the next step in the continuing exploration of co-acculturation take the form of a longitudinal study. The seemingly dynamic process of acculturation can be tracked and changes linked to their antecedents and consequences over time. Ours was simply the first exploration of the conjoint activity of mutual cultural adjustment and adaptation.

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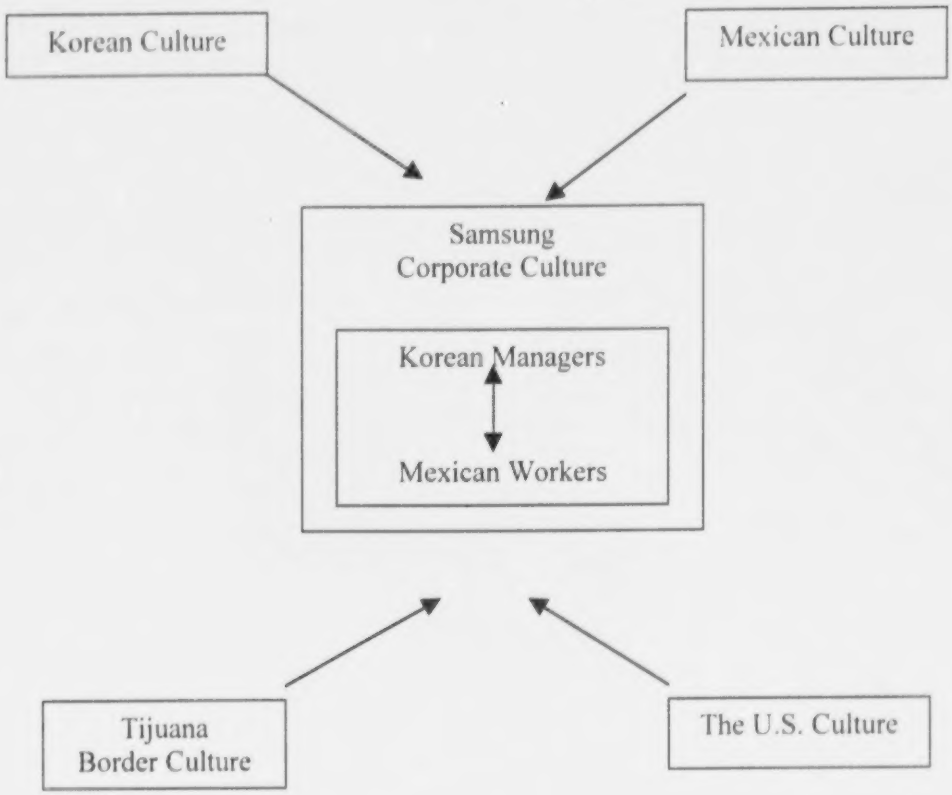
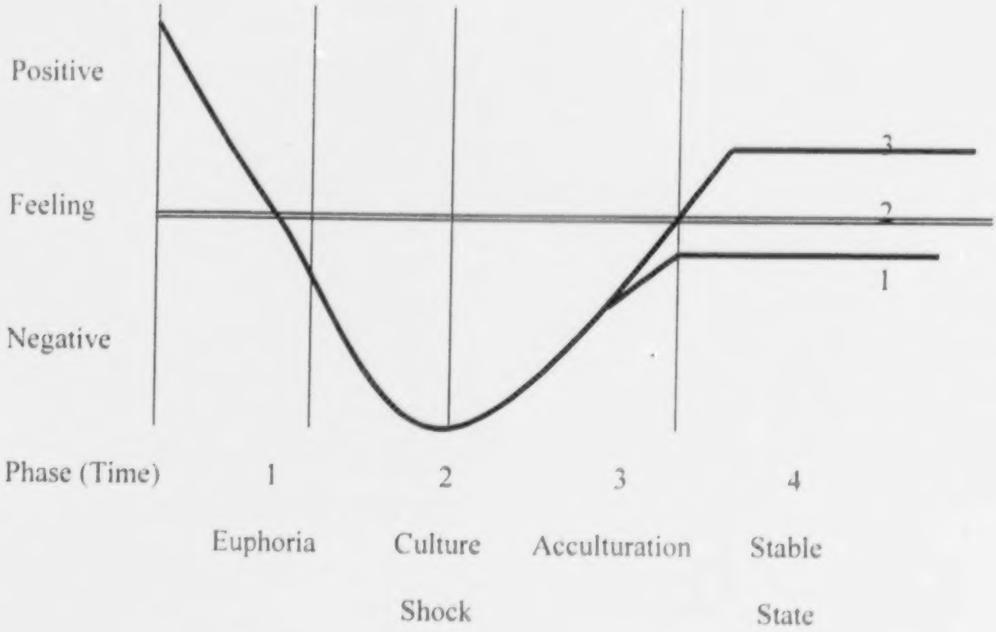

Korean Culture
Mexican Culture
Samsung Corporate Culture
Korean Managers
Mexican Workers
Tijuana Border Culture
The U.S. Culture

Figure 1

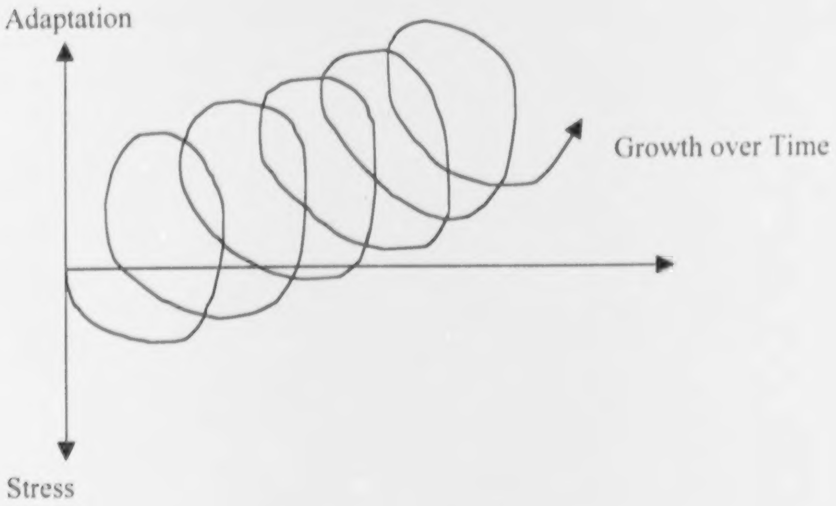
Cultural environment in Samsung Tijuana Park



Note. From Cultures and organizations: Software of the mind (p. 210), by G. Hofstede, 1991, London: McGraw-Hill.

Figure 2

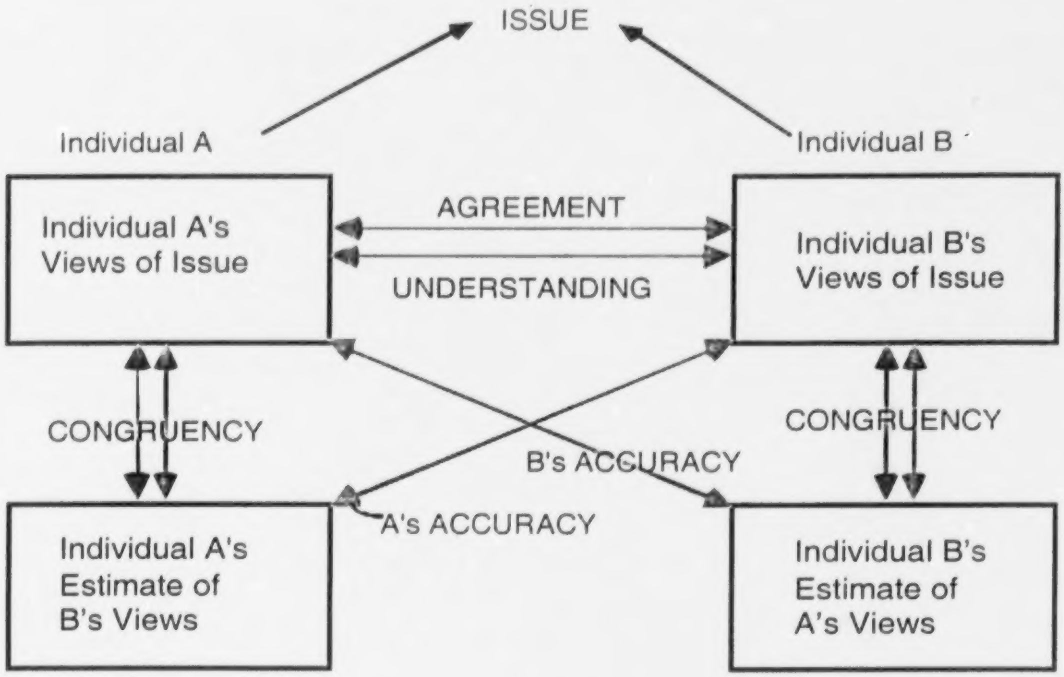
The acculturation curve


Adaptation
Growth over Time
Stress

Note. From Communication and cross-cultural adaptation: An integrative theory (p. 56), by Y. Y. Kim, 1988, Clevedon: Multilingual Matters.

Figure 3

Stress-adaptation-growth dynamics of adaptive transformation


ISSUE
Individual A
Individual B
Individual A's Views of Issue
AGREEMENT
UNDERSTANDING
Individual B's Views of Issue
CONGRUENCY
CONGRUENCY
B's ACCURACY
A's ACCURACY
Individual A's Estimate of B's Views
Individual B's Estimate of A's Views

Note. From Interpersonal approaches to communication research (p. 484), by J. M. Mcleod and S. H. Chaffee, 1973, American Behavioral Scientist, 16, 469-500.

Figure 4

The coorientational measurement model

Table 1

Symmetrical host-stranger relationship in multinational organization

	Nation	Organization
Expatriated managers	Strangers	Host
Resident workers	Host	Strangers

Table 2

Concepts of acculturation, coorientation, and co-acculturation

	Acculturation	Coorientation	Co-acculturation
Definition:	Resocialization to a new culture	Simultaneous orientation toward each other and toward the same object	Simultaneous orientation toward each other and toward the same cultural dimensions
Host-stranger Relationships:	Asymmetrical	Symmetrical	Symmetrical

Table 3

State of co-acculturation

		Actual Cultural Agreement	
		Low	High
Perceived Cultural Agreement	Low	True Cultural Conflict	False Cultural Conflict
	High	False Co-acculturation	True Co-acculturation

Table 4

Factor analysis of cultural items

	Component					
	1	2	3	4	5	6
high value on Samsung family	.687				.373	
individual better decision than group	-.684					
respect formal line of authority	.563			.351		.203
sacrifice life to work	.483	.458				-.228
loyalty to Samsung	.479				.470	-.312
detailed instructions not general guidance		.790				
prefer to work with close supervision		.653			.222	.365
hesitate to express			.816			
not understand Mexican or Korean			.619		-.316	.282
mean more than words			.577		.302	
prefer printed materials than talking directly		.291		.650		
recognition & advancement than friendly				.636	.232	
prefer salary over flexible working hours	.256			.579	-.289	
follow directions faithfully					.768	
no difference men and women						.809

Extraction method: Principal component analysis.
Rotation method: Varimax Kaiser Normalization.
Rotated component matrix: Rotation converged in 9 iteration.

Table 5

Factor analysis by Korean

	Component					
	1	2	3	4	5	6
loyalty to Samsung	.884					
high value on Samsung family	.843					
individual better decision than group	-.428	.215	.258		.267	-.377
prefer printed materials than talking directly	-.216	.760		.249		
ecognition & advancement than friendly		.749				
prefer salary over flexible working hours		.630				
prefer to work with close supervision			.807			
detailed instructions not general guidance		.281	.715	-.356		
follow directions faithfully	.317	-.398	.448	.368		.228
respect formal line of authority		.295		.862		
no difference men and women		-.354		.479		-.455
mean more than words	.414				.708	
sacrifice life to work	.526				-.663	
hesitate to express	-.273	.249	-.381		.515	.316
not understand Mexican or Korean						.847

Extraction method: Principal component analysis.
Rotation method: Varimax Kaiser Normalization.
Rotated component matrix: Rotation converged in 9 iteration.

Gender Discrepancies in a Gendered Profession: A Developing Theory for Public Relations

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Abstract

This paper illustrates through literature and original research a beginning theory that explains the enduring gender discrepancies in what has become a gendered field, that of public relations. A survey of public relations practitioners reveals statistically significant gender differences in hiring perceptions, salary and salary perceptions, and promotions. These data support several previous studies that have shown over time gender discrepancies in hiring, salaries and promotions. Using theory drawn from other fields as well as original data from a series of focus groups, authors construct concepts and theoretical propositions to help explain why there are still gender differences in a field that is predominantly women.

Over the last ten years, gender discrepancies in hiring, salary, and promotions have been found in quantitative and qualitative studies in public relations. Although there have been a few critics of these studies, surveys and focus groups continue to offer valid and reliable statistics and experiences attesting to the fact that, although the public relations profession is almost 70% women today, men are often favored for hiring, higher salaries and promotions to management positions.

What seems to be missing in this body of literature, however, is a theory explaining why the gender discrepancies are so enduring in the field, especially when the field is mostly women. In other disciplines such as business and marketing, there have been theories developed to help explain gender differences, but theory building about gender differences in public relations has been minimal. In addition, the unique presence of gender discrepancies in public relations where women are currently the majority needs to be addressed more seriously and empirically. The liberal feminist approach -- which supported increasing numbers of women to make women equal to men -- has not worked in public relations.

This paper takes the previous studies on gender discrimination in public relations and the theories derived from other fields such as management and marketing, and adds findings from original research to begin a theory explaining why the gendered profession of public relations continues to illustrate gender differences in hiring, salary, and promotions.

Literature Review

Since the late 1980s when the field became over 50% female, there have been several professional studies and other literature reporting gender differences in a variety of areas, including sexual harassment, job satisfaction, hiring, salaries and promotions. The most publicized professional studies that examined gender differences include: *The Velvet Ghetto* (Cline, Toth, Turk, Walters, Johnson & Smith, 1986); *Beyond the Velvet Ghetto* (Toth & Cline, 1989); a special issue of *Public Relations Review* (Grunig, 1988) on women in public relations; *Under the Glass Ceiling* (Wright, Grunig, Springston, & Toth, 1991); a follow-up PRSA audit of gender issues (Toth, Serini, Wright & Emig, 1998); Hon's (1995) feminist theory of public relations; and a compellation of the literature on how gender influences public relations practice published in *Women and Public Relations* (Grunig, Toth, & Hon, 2001).

Hiring

The literature on hiring and gender in public relations suggests that women have been increasingly hired into public relations over the past 20 years. The U.S. Department of Labor reported that in 1979 there were less than 44% women in public relations (U.S. Department of Labor Statistics, 1980, p. 174). In 2000, women comprised 70% of the public relations field (PRSA/IABC salary survey, 2000, p. 23).

An important trend in hiring of women in public relations is that it had happened much more dramatically than the entry of women into all occupations. Reskin and Roos (1990) listed public relations as one of the occupations in the 1970s to show a "disproportionate" increase in female workers, "during a decade in which their advancement into most male occupations was modest at best. . ." (p. 6). Wootton (1997) noted that between 1985 and 1995, women managers, marketing, advertising, and public relations increased by 11.9%, while women public relations specialists increased by 9.2% (p. 7).

Why women have been disproportionately hired in public relations was by 1978 already a topic of speculation. *Business Week* described public relations as "the velvet ghetto" of affirmative action:

> When is affirmative action not so affirmative? When companies load their public relations departments with women to compensate for their scarcity in other public relations or managerial capacities, that usually lead more directly to top management. (PR: The velvet ghetto of affirmative action, 1987)

The data from studies of public relations practitioners about affirmative action and hiring supported this argument. Men in 1990 and 1995 believed that if an equally capable women and man applied for the same public relations job, the woman would be hired (Grunig, Toth, & Hon, 2001). In both 1990 and 1995, women disagreed that they were more advantaged; but men were more uncertain than women that women were often hired because of affirmative action policies in their organizations (Grunig, Toth, Hon, 2001, pp. 264-266). The 1990 and 1995 gender audits done for the Public Relations Society of America also indicated that women perceived more than men that they were hired for public relations positions involving mainly communication skills. Hon (1995) reported that college curricula could be contributing to women's hiring into communication skills jobs because the focus of their education was on technical skills and not on managerial subjects. The 1990 and 1995 PRSA gender audits indicated that fewer women believed that women were more likely than men to be hired for public relations management positions involving problem-solving and decision-making (Grunig, Toth, & Hon, 2001, p. 265).

There have been several assumptions reported as to why so many women were being hired into public relations. Donato (1990) summarized the following: affirmative action requirements; the sex specific demand for women; women as a "better buy," referring to the surplus of women; new women publics for which there was a commercial value; female-intensive industries, fields offering flexible hours and fewer sexual barriers; a gender ideology that favored women's social skills over men's; and women's attraction to public relations because it gave women better opportunities than they had in other occupations.

Salaries

Most of the atheoretical research about women in the public relations profession has focused on salary disparities between men and women. Studies and professional audits continue to find a significant salary gap between women and men, where men make more average annual income. In 1995, Simmons Market Research conducted a survey of PRSA salaries, and confirmed a salary difference:

> There continue to be disparities between the salaries of men and women. These exist across age, experience and job title. On average, men's salaries are 45% higher than women's ($59,460 vs. $41.110). (Salary Survey of Public Relations Professionals, 1995, p. 4)

In 1998, the *pr reporter* found that men's median salary was $72,000, $16,000 greater than women's average salary of $56,000 ("30th survey," 1998). *pr reporter* concluded: "It is no longer possible to deny a prejudice here. . ." (p. 1.). In 1999, Impulse Research for *PR Week* reported that in public relations, women earned 38% less than men. The average salary for men was $81,920, whereas the average salary for women was $59,026 (Leyland, 2000). Authors Seideman and Leyland (2000) asserted that there was a "distinct discrimination" (p. 29).

While these most recent salary studies found that a gender disparity in salaries was due to discrimination, there have also been other interpretations. Among them are age -- because women in the surveys are on average younger in age, experience, type of organization in which the public relations person works, and public relations roles (Grunig, Toth & Hon, 2001, pp. 209-219). These interpretations had some support in the past because several of the professional audits did not look at men and women's salaries while holding equivalent age, experience, type of organization, and roles. The current study did attempt to take several variables into consideration to clarify reasons for the gender disparity in salary.

Promotion

For years, the term "glass ceiling" has been used to describe the invisible barriers women face when attempting to be promoted. However, although awareness of the term is widespread, research continues to show its remarkably enduring existence. While women comprise 70% of the jobs in public relations today, they do not comprise this percentage of the higher positions in public relations. Wootton's (1997) analysis indicated that in 1995, 35.7% women were managers in marketing, advertising, and public relations. Of the public relations specialists cited from U.S. census data in 1995, 59.7% were women (p. 7).

The Broom and Dozier research (Broom, 1982; Broom and Dozier, 1986) on public relations roles first identified a glass ceiling in public relations by reporting that for a two-role manager and technician typology in public relations, women were more likely to be found in the technical roles. However, in 1995, Dozier and Broom reported that attaining the manager role was explained more by experience than it was by gender (Dozier & Broom, 1995).

While the Dozier and Broom study suggested this alternative interpretation to the glass ceiling, the 1990 and 1995 gender audits of the Public Relations Society of America (Grunig, Toth, & Hon, 2001, p. 269) indicated that promotions for women were less than promising. In 1990 and 1995, women agreed more strongly than men that men were promoted more quickly in their organizations. Women believed this to be the case throughout public relations. Men disagreed that they were promoted more quickly in *their* organizations, but they were uncertain about the field itself. Also, in both 1990 and 1995, women considered it more difficult for them to reach the top in public relations, in their organizations and throughout public relations. In 1990, men agreed to a significantly greater extent than did women that they had a fair shot at promotion in their organization (Grunig, Toth, & Hon, 2001, p. 269). As a final note, three quarters of the members of the Women Executives in PR polled in 2000 believed there was still a glass ceiling in their industry (Women PR execs see discrimination, 2001).

Perspectives on Gender from Other Fields

There are three main perspectives or approaches that we examine here for understanding gender discrepancies. These derive from management and marketing. The approaches are human capital; sex segregation and systems analysis; and organizational and social models

(Toth, 1996).

Human Capital

The human capitalists believe that the explanation is that women have not had enough managerial experience as yet because they are too new to the field to have gained it. This theory suggests that "capital" is available to everyone. Capital includes education, years of experience, and professional development opportunities. It is up to each individual to develop his or her own portfolio. However, this model is problematic if these investment opportunities are not equally available to men and women.

Paglin and Rufolo (1990) define the human capital model as "based on the insight that investments in human beings produce an intangible form of capital that is significant in analyzing production. Differences in the amount of a person's human capital explain many of the commonly observed gender differences in both productivity and earnings" (p. 140).

Sex Segregation

Sex segregation and systems analysis looks at the occupational segregation phenomena from a systems perspective (Reskin & Roos, 1990). Women appear to move into different occupations at differing rates, rather than into all occupations generally. This suggests that employers (men) permit women to enter fields that are no longer of interest to men or because women are assumed to have specific characteristics (stereotypes) that make them better at the tasks. Men move on to the most high status and lucrative occupations, leaving openings behind in certain occupations for women.

Because only a few more lucrative occupations are open to women, women do the best they can from a more limited choice. For example, women make a lot more working in public relations than they do in teaching and nursing. Because women crowd these better occupations that they are permitted to enter, they provide an "oversupply" and bring wages down. Reskin and Roos (1990) describe this model as an offshoot of the human capital model.

Organizational and Social Models

Organizational and social models suggest explanations for gender disparities that lie in the structural demands of organizations and society (Canning, 1991; Haberfeld, 1992). Hersch (1991), for example, looked at the influence of household responsibilities, working conditions, and on-the-job training. Maurme (1998) identified the organizational constraints of women managers in traditionally female jobs. She found that these women have fewer opportunities to move up the ladder than do women in traditionally male jobs. Lauzen (1992) found that there were higher levels of encroachment on the public relations function within organizations when the top PR person was a woman. The U.S. Department of Labor (1997) underscored the additional societal expectations surrounding women's productivity by highlighting employers' "growing tendency to provide child care benefits, flextime, and family leave policies" (p.7) to support women's responsibilities outside the workplace. Also, social norms are evident in Myerson and Flectcher's (2000) manifesto for shattering the glass ceiling:

> The company's norms made it extraordinarily difficult for everyone -- women and men -- to work effectively. But, they were particularly pernicious for women for two reasons. First, women typically bear a disproportionate amount of responsibility for home and family and thus have more demands on their time outside the office. Women who work set hours -- even if they spanned two hours a day -- ended up missing essential conversations and important plants for new products. Their ircumscribed schedules also made them appear less committed than their male counterparts. In most instances, that was not the case, but the way the ompany operated day to day -- its very system -- made it impossible to rove otherwise. (p. 3)

Research Questions

Although we enter this study with some assumptions about the findings, as mentioned previously, there has been little actual theory in public relations about gender discrimination. For this reason, research questions are more theoretically appropriate than hypotheses. The following research questions are used to guide this study:

RQ1: What are current perceptions of gender discrepancies in hiring, salary and promotion in PR?

The findings from an original, quantitative survey of public relations practitioners help answer RQ1 by describing not only perceptions but also the state of the field today in terms of salary.

RQ2: What are factors that help explain any gender discrepancies in hiring, salary and promotion in PR?

Themes that emerged from focus group transcripts answer RQ2 by offering factors that explain any gender discrepancies revealed through the survey.

Method

The findings used to develop a theory of gender discrepancies in public relations derive from a survey and focus groups of public relations practitioners. The survey was conducted in the summer of 2000, and focus groups were held in the fall of the same year.

Survey

We first conducted the survey, distributing 4,000 printed questionnaires to a systematic, simple random, nationwide sample of public relations practitioners who were members of the Public Relations Society of America.[1] The survey instrument included 7-point scaled items that ranged from 1, "very strongly disagree" to 7, "very strongly agree," with 4 being "uncertain/not sure/don't know." These items were statements measuring perceptions about gender differences in hiring, salary and promotions, in the respondents' organization and also throughout public relations. For example, statements included: "Women are more likely than men to be hired for public relations staff positions involving mainly communication skills – in your organization, and throughout PR"; and "Women often are hired as a result of affirmative action policies – in your organization and throughout PR." There were also items asking about annual salary, bonuses, job interruptions, promotions, years of experience, and demographic measures. All items on the questionnaire measuring demographics, hiring, salary, and promotions were used in a 1990 and 1995 national survey of public relations practitioners. Therefore, findings could be compared to previous findings, and questionnaire items could be tested for validity and reliability.

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[1] The variables described here measuring hiring, salary and promotions were part of a larger study of public relations practitioners funded by the Public Relations Society of America.

We received a total of 864 completed questionnaires, a 22% response rate. To confirm that the low response rate did not reflect a discrepancy between our sample and the population, we ran frequencies, and found that our returned sample had similar characteristics as the PRSA membership on the whole. For example, age, education level, job characteristics, and the proportion of males to females were similar. Therefore, those who responded to the questionnaire and those who did not were not significantly different from each other.

In general, the average survey respondent was a 40-year-old, white married female with a bachelor's degree who has worked in public relations for a little over 13 years. The average, overall salary equaled $60,935 (Please see Tables 1 and 2 for survey demographics).

SPSS was used to analyze the data. In addition to descriptive statistics, one-way analysis of variance (ANOVAs) as well as t-tests assessed whether there were significant mean differences between male and female respondents. Regression analysis was run to measure confounding effects on the correlation between gender and salary.

Tables 1 and 2 about here

Focus Groups

After the survey data were analyzed, we conducted six focus groups to help interpret the survey findings. We held one male and one female group in Portland, OR, New York, NY, and

Washington, DC. The six focus groups were held in university settings and in public relations agency offices.

Participants for the focus groups were recruited through PRSA and through personal contacts. In order to participate, a public relations practitioner had to have a minimum of five years experience, but did not have to be a member of PRSA. As incentives to participate in the groups, we provided a copy of the final report, dinner, and a donation to a national charity.

A total of 40 public relations practitioners participated in the focus groups, 23 women and 17 men. The participants worked in government, education, corporate, military, and agency settings, and ranged greatly in terms of years of experience and age. Also, about half the participants had children and half did not. Most of the participants were college-educated and white, though approximately half the practitioners in the D.C. groups -- which totaled 15 -- were African American and Asian American.

Focus group moderators were either university professors or trained, professional moderators. They matched the sex of the groups they facilitated and received a detailed packet of information about how to conduct the groups, what to say, how to address questions, and how to secure proper consent. The authors of this paper moderated two of the groups to experience first-hand the process and the type of data gathered.

The focus groups were tape recorded in order to grasp all detail and exact quotes. The authors transcribed the tapes and analyzed them for common themes as well as unique comments that emerged from the discussions.

Results

First, the survey data are briefly described to help answer RQ1. Then, the focus group findings are used to answer RQ2.

RQ1: What are perceptions of gender discrepancies in hiring, salary and promotion in PR?

Overall, the survey results showed that respondents did in fact perceive gender discrepancies – they generally perceived women to not be hired or promoted as equally as men and they reported a salary discrepancy. When male and female respondents were compared, the findings became even more significant, where female respondents perceived greater gender discrepancies with hiring and promotions, and were less satisfied with their income. In terms of actual salary, male respondents made significantly more than female respondents, even after age, level of education, job interruptions and years of experience were taken into account. Below are details of the survey findings.

Hiring

Survey respondents – both men and women -- agreed that women were more likely to be hired for technical positions ($x = 4.18$ in their organizations, $x = 4.70$ throughout PR), and slightly disagreed that women were hired for management positions ($x = 3.63$ in their organizations, $x = 3.70$ throughout PR). Using paired t-tests, this difference in agreement was found to be statistically significant for "within your organization" ($t = 9.26$, $p < .01$) and "throughout public relations" ($t = 17.14$, $p < .01$). Also, respondents slightly disagreed that a woman would be hired over a man and disagreed that women were hired as a result of affirmative action.

When respondents were divided by gender, several significant differences emerged. For example, whereas male respondents disagreed that women were more likely to be hired for staff/technical positions in their own organizations, female respondents agreed with this statement ($F = 33.39$, $p < .001$). Also significant was the finding that female respondents disagreed more than male respondents that throughout PR, a woman would be hired if an equally capable woman and man applied for the same job ($F = 18.04$, $p < .001$) (please see Table 3 for one-way ANOVAs for all hiring perception variables).

Table 3 about here

Salary

Overall, the average salary for survey respondents totaled $60,935. The men's average salary ($73,700) was higher than the overall average, and the women's ($56,000) was a little lower. When looking at median salary, men's was $65,000 and women's median salary was $48,000. The average percentage increase in salary over one year for men equaled 9.75% and for women was 9.62%, resulting in no statistical significance. Similarly, there was no significant difference between male and female respondents in terms of average monetary bonus they received over the past year (males' x = $13,266, females' x = $8,924).

The difference in the average salary of male respondents compared to female respondents was statistically significant (F = 44.03, p < .001) (please see Table 3). Regression analysis revealed that years of public relations experience accounted for much of the variance, but that gender and job interruptions also accounted for of the salary difference. Age and education level were found to not be significant influences on salary. Of particular note, however, even when years of experience, job interruptions, age and education level were accounted for, gender still made a significant impact on salary, where men made more than women (please see Table 4).

Table 4 about here

Looking at perceptions of salary, all respondents slightly disagreed that women in their organizations received lower salaries for doing comparable work (x = 3.67), but agreed that women throughout public relations received lower salaries (x = 4.98). Also, respondents agreed that women in management positions get paid less than men, in their organizations and throughout public relations.

When comparing male to female respondents, again, there were significant differences. For example, female respondents agreed significantly more that women receive lower salaries for doing comparable work and if they were in management positions, both for their own organizations and throughout public relations (again, see Table 3). Also, men were significantly more satisfied with their income as a public relations practitioner than women were (F = 6.60, p < .05).

Promotions

Overall, respondents slightly disagreed that men were promoted more quickly than women in their own organizations (x = 3.59), but agreed that they were promoted more quickly throughout public relations (x = 4.47). Similarly, respondents agreed that it was more difficult for women than for men to reach the top throughout public relations (x = 4.35), but slightly disagreed that this was the case in their own organizations (x = 3. 84).

Statistically significant differences were found for all items when male and female respondents were compared. In their own organizations as well as throughout public relations, female respondents agreed much more than males that men were promoted more quickly and that it was more difficult for women to reach the top. Male respondents disagreed that men were promoted more quickly in their own organizations (x = 2.98) (please see Table 3).

RQ2: What are factors that help explain the gender discrepancies in hiring, salary and promotion, in PR?

The focus group data helped answer RQ2, by illustrating distinct themes that emerged around how the participants explained the gender differences found in the survey data. Overall, focus group participants did not discuss hiring much, and did not see a problem with hiring men over women. Female participants discussed salary at length, and all participants discussed promotions at length.

Hiring

Discussions about hiring in general were minimal, mainly because most participants did not see hiring as much of a problem. The following were the few factors that emerged from focus group discussions that helped explain how participants viewed hiring and gender in public relations:

There is not a problem with hiring women because more women are entering the profession. Female and male participants agreed that hiring was no longer so much a problem for women. One man who works in an agency said, "We hire mostly women because that's what we see." Some female participants claimed that, instead of a focus on hiring, the focus should be on the problem of male promotions over females' for management positions.

Men are being hired over women to counterbalance the influx of women into the profession. Several participants believed that organizations sought out male hires to counterbalance the number of women entering the profession. One woman admitted, "I think even the women want more guys. They even say that. We need more men around here, just to balance it out. They don't care what position he is, whatever level." One man explained his attempts to hire men: "We get a guy candidate, we have to take a look at this guy!...It's informal. I wouldn't say anybody sat down and said we want to hire more men. It's probably not politic."

In public relations agencies, clients still want male representatives. A few participants who work in agencies argued that client needs dictated hiring men over women. One male participant said, "There's still a bias on some clients for a male point of view, and a senior male point of view. And they'll *say* male." A female participant described the actions of her female boss: "She felt compelled to hire a man to bring in new business pitches because the face of her clients were a lot of men."

Salary

In general, female participants shared stories of discrimination while male participants said they did not believe there was a salary discrepancy. However, a couple of male participants admitted to knowing that they received higher salaries over comparable female colleagues or that they themselves paid women less when hiring them. One story from a male participant illustrates his rationale for his decision:

> I did hire a man and a woman at the same level, and I realize the woman makes somewhat less money. And there were two factors for that. One, was um, length of experience in this case, at the same level. Not a huge difference, but enough. Uh, the man brought some income generating skills with him, that made a difference. And I knew what both of them made at their previous jobs. And so, you sort of make your best deal going in.

This quote illustrates some of the many factors that emerged that explain the relationship between gender and salary in public relations:

Skills differential. Many of the women and men in the groups said that women in public relations lack the negotiation skills and knowledge necessary to request higher salaries. One man said, "For those people [men] who are willing to put on a show and press the issue, my guess is they do better [in salary]." One woman explained how she gained negotiation skills: "On two different occasions, I was offered a position, and on two different occasions, I got the negotiation skills I learned from a *man*."

Socialization. Women and men are trained or acculturated at a young age to act a certain way, according to several participants. Women, for example, are socialized not only at a young age but also at jobs to not be aggressive or demanding for salary. One woman described how she was perceived as too aggressive when she asked for a merit increase: "They [were] trying to, in a sense, say back off, don't be aggressive about your career." Another participant commented, "If you were a man, they would value the fact that you were very aggressive." Also, a couple of participants asserted that women are socialized to perceive only two options with salary, taking the offer or not taking the job, which leads to a lack of negotiation. Another woman explained the socialization process for men as well as for women:

> Men are taught to negotiate a lot stronger and a lot harder than women…a mother might say to her daughter, "Are you sure? You don't want to push things, you don't want to push it too hard because don't you need the job?" Whereas men, their father, they're more judged by how much money they're making.

Gender discrimination and sexism. There were several different comments by focus group participants that came together to define a discrimination factor. In other words, salary bias was due to the sole fact of being female. One woman remarked, "Every industry that you look at, men make more than women, period." A male participant said there are higher work expectations for "white males" and therefore, they get paid more for the work. A female participant agreed with this assertion, by claiming that men don't think women do comparable work: "They see her as taking on some lesser role…I really think they think their work is more important, even with somebody who might hold the same title." Another man asserted that upper management "still haven't gotten over the fact of the mentality that women should be at home maintaining a fifties lifestyle, then they tend to be paid lower. I have a wife who complains about that all the time."

Other comments illustrated sexism by the participants themselves in explaining salary differences. For example, one man said, "Women I think it is safe to say are more into taking the nonprofit jobs, which tend to pay less. And they're probably more inclined to do pro bono work, like a female would be just 'Oh, well, I'll help you out.' So their time is devoted to pro bono, and therefore, their income is less."

Balancing work and family limits salary level for women. Whether they work less hours each day or go part-time, participants argued that women who are still the major caregivers will have lower salaries. One man gave an example: "I had a young lady. She had one baby, and she's pregnant with another, and she has decided to go part time, with the resulting reduction in salary."

Men are offered more money for recruitment and retention purposes. Participants believed that men are offered more money because of the gender imbalance in public relations. One woman explained how her female boss paid a male hire more in order to make sure he accepted the job. Another female participant said, "You almost will pay them a little bit more because you need the balance throughout."

Historical disparity that is difficult to regain. Some of the participants argued that if women started out making lower salaries in the past – when there was overt sex discrimination – then they would continue to make lower salaries as they move jobs or move up to management. One male participant commented, "So if there's a historical disparity, it's liable to be perpetuated somewhat." Another agreed, "If you're making less all the way through, you always have that…When you make a leap people know what you make."

Relationship between gender and salary is equal. A few of the male participants said they did not see any gender differences in salary levels in their own organizations. A couple of them denied the accuracy of the survey findings altogether, while a couple of others explained away the difference. As one man put it, "You know, public relations is a pretty broad field, and there's wide differences in compensation between nonprofit, agency and corporate practitioners…And I also think the overall relative experience factors in. Certainly, an entry-level person coming into public relations is going to make less money than people with ten years of experience." A few other men admitted to women being treated differently within organizations, but not with salary. For example, one participant said, "It creates a frustration for those who are not treated the same. We're all being *paid* the same, so nobody worries about pay."

Promotion

Most participants agreed that promotions are harder to secure for women, while some felt that the glass ceiling was disappearing because men were disappearing from the field altogether. Factors that emerged to explain the relationship between promotions and women in public relations included the following:

Socialization. One example of socialization was that a couple of female participants mentioned that male employees are taught from a young age to feel a sense of entitlement for moving up an organization's hierarchy, and therefore, feel comfortable asking for promotions. One participant remarked, "Women I think sometimes think, 'Oh, gee, I'll ask, but, oh, gee, I don't know if I deserve it.' And guys expect they deserve it." Another participant said that men come in to entry-level positions already socialized to act like managers, and therefore, will be promoted faster than women. She explained, "I find that entry-level guys are immediately the first ones to delegate…the men come in and immediately they'll do the parts they like and they'll pass off to women whatever they don't want to do."

A couple participants asserted that the socialization of older males in management positions kept younger women from being promoted. One man said, "There are certain expectations with people in upper management, they get used to working with a certain kind of person all the time." One woman believed that older men in executive positions have wives who stay home, and therefore, do not perceive women to be equally as capable as men in the workplace -- these male executives transfer their perceived lower expectations of women to the female employees at work.

Gender discrimination and sexism. Again, discrimination against females just because they are females emerged as a factor. For example, one male participant remarked, "It is still a man's world." One woman who worked in a top five agency commented, "Almost every occasion, the men were given better accounts, and because they were given better accounts, they were promoted faster."

Also, the "good ol' boys network" is being perpetuated, handed down to a younger generation of males, who continue traditional practices that help groom males for management positions. One female participant described a job she had at an agency that bought membership to a cigar club, where the male employees gathered and courted clients. She also said the men at this agency played golf together. She concluded, "Who's really running the agencies and who's really being groomed to take over for that? It's the guys, who are forty and above that are continuing it, the good ol' boys network." A male participant described his wife's situation, where "the men in her comparable position, they have secretaries, they play golf. My wife works. When they're out playing golf, she's expected to work, because she's not part of that."

Another bias was against women who have children. Several participants agreed that there is still the perception that if women have children, they are headed for the "mommy track" and will leave the work force altogether. One woman remarked, "They don't want a VP coming back, who can only work four days and work one day at home, that's a bad, bad thing. And I think that really has to change in order for women to move ahead."

Unrealistic expectations on the part of women who want to balance family and work. Some of the participants questioned whether women themselves were to blame for expecting to be promoted after working fewer hours to be with family or after taking maternity leave. One woman commented, "I often wonder who *stays* on the ladder and ends up running the company?" Another one remarked, "Definitely taking time off to have kids hinders your ability to progress." Some participants argued that socializing and "schmoozing" occur after work hours end, so women who take off at five will not be part of the organization's culture. Another woman knew that she would not be promoted because of the time limitations she put on herself:

> They give the plum assignments, the track promotional assignments, I didn't get to work on things that might make me stay late. Because they just didn't want to give it to me, without asking whether it fit in my schedule. But just assuming, she's with kids, she's going to be distracted…I've told them, if it's an emergency I can stay late, but no, I don't want to be staying past five every single day. But, I will not be in line for promotion until I get to the point that the kids are old enough, that I'm willing to work late hours. That's the trade-off.

Biological determinism. Several male participants discussed the existence of innate or biologically determined traits that distinguished men from women, which in turn, helped or hindered their ability to move up to managerial positions. For example, one male said, "A man's ability to make a concise, a decision right away is more prevalent than a woman. A woman has to look it over, different angles, blah, blah, blah. Just like she's buying furniture. Men have been empowered because of our ability to do that quickly."

Skills differential. Different skills were listed as reasons why men were promoted over women. One woman, for example, said that men are skilled in "politicking for themselves around the office in order to get to the next level," whereas women, she said, "seriously like the satisfaction of doing a good job," regardless of whether it is noticed.

The few number of men in the profession has led to favoritism for promotion. Because there are so few men in a predominantly female profession, the men are selected for management positions, by both female and male supervisors. One woman commented, "I even get the feeling that when there are men who do come in the agency, that they're sort of plucked, focused on and groomed for those managerial positions."

Type of organization. The type of PR and organization seem to influence women's access to promotions. In talking from their own experiences, the focus group participants revealed distinctions according to where they worked: agency PR, corporate PR, or in government. However, there was little consensus as to characteristics for each type of organization. For example, some of the participants thought agency PR was more amenable to promoting female managers, whereas other participants thought agency PR was the worst in terms of a "good ol' boys network." A couple of participants discussed how much easier they believed it was to balance work and family and still get promoted in state government jobs, but not in agency work. However, one participant who worked in the government argued that all her managers were male and all the technical staff were female.

Women and men are equal in access to promotions. A few participants argued that the relationship of women to promotions was equal to the relationship of men to promotions. Although it was only a few participants, their comments are worthy of examination. One male participant remarked, "If there's one profession that I think has no glass ceiling it's ours. Women are as successful if not even more successful in this business." Another male participant said, "My workplace is very equitable…It's as close to a gender blind meritocracy as I've ever seen." However, this same participant later confessed that "the more senior levels in my company may be a little different, but…" Another participant commented, "The roles people are playing tend to be a little top heavy with men at the top, but women are working their way up."

Discussion/Conclusion

This study used a quantitative survey to document gender discrepancies in public relations and qualitative focus groups to help find factors that explain why the discrepancies exist. In summary, the survey found that respondents perceived gender discrepancies in hiring, promotions and salary, and that female respondents perceived greater discrepancies than male respondents. In terms of actual salary levels, the survey found that female respondents make significantly less annual income than male respondents. More importantly, when years of experience, job interruptions, age and education level were accounted for, gender still made a significant impact on the salary difference.

The findings from the survey lend support to all the previous gender studies in public relations, which also documented differences in hiring, salaries and promotions between men and women. What is unique about this current study is that it documents gender discrepancies at a time when the public relations field is predominantly women, whereas the previous studies found discrimination when the field was still predominantly men or when the field had equal numbers of men and women. The current study extends the previous professional research in this area by discovering explanations for this gender discrepancy in a gendered profession.

The focus groups revealed distinct factors that help explain the gender discrepancies found in the survey findings. For hiring, only three factors emerged: 1. Gender discrimination in hiring no longer exists because of the large influx of women in the profession; 2. Men are being hired over women because they are rare in the field; and 3. Men are being hired because clients want male representatives. Although the last two factors could be seen as political or biased, neither the men nor the women in the focus groups found problems with these practices.

Discussions of salary revealed seven factors that explain the relationship between salary and gender. These factors were: 1. skills differentials, in particular with negotiation tactics; 2. socialization on the part of both men and women; 3. gender discrimination and sexism; 4. women attempting to balance work and family limits salary levels for them; 5. recruitment and retention efforts for men leads to their higher salaries; 6. historical parity that is difficult to regain; and 7. salary discrepancy due to gender is not a problem.

Finally, discussions about promotions led to eight factors that explain why there exists gender differences. These factors were: 1. socialization; 2. gender discrimination and sexism; 3. unrealistic expectations of women who balance family and work; 4. biological determinism; 5. skills differentials; 6. favoritism towards men due to their low numbers; 7. type of organization influences access to promotions; and 8. gender discrepancies in promotions do not exist.

It was important to note the responses from the few participants who denied any discrimination in salary and promotion, in order for a burgeoning theory in this area to be comprehensive. The comments in this vein were interpreted as denial or rationalizations, for three reasons. First, the comments derived solely from male participants, who by the nature of their sex would not have experienced any discrimination. Second, men may perceive implicit blame since they are the ones who are in positions of authority in public relations, and, therefore, the male respondents may have felt threatened. Third, other male participants who began by denying the existence of discrepancies later confessed to hiring men over women or paying a woman less than a man for the same position.

The factors revealed through the focus groups can be compared to the three theories borrowed from management and marketing. First, there was minimal support here for the human capital theory. A few male focus group participants asserted that women have not moved into managerial positions because they are too new to the field to have gained any managerial experience, but this did not emerge as an overriding or predominant theme. The human capital theory suggests that gaining "capital" is available to everyone. However, in public relations, it seems that investment opportunities are not equally available to men and women.

Sex segregation using systems analysis seems a slightly better fit with the factors found here. Sex segregation applies if we assume that employers – in this case males -- permit women to enter public relations because men are no longer interested in the field and because women are assumed to have specific characteristics that make them better at the tasks. According to sex segregation theory, men move up into management, and women do the best they can from technical positions. Now that women crowd public relations, they provide an "oversupply" and bring wages down.

The findings from the current study seem to mostly support the organizational and social model, which addresses structural demands of organizations. For example, there are still a lot of travel demands in public relations that women with children are less likely to be able to meet. There is also stigma that if a woman leaves to have a baby, she won't return to work. In addition, women continue to be the primary care provider and housekeeper, in essence balancing two jobs.

None of these three theories, however, are comprehensive enough to encompass all the factors found in the current study. One reason for this might be the unique nature of having a predominance of women in the field. Another reason might be inherent within the public relations profession itself, a fast-paced service profession spanning from the most technical position to the chief communication officer. The scholarly body of knowledge in public relations requires its own theory of gender discrimination in a gendered profession.

We started developing this theory by first describing the problem and then discovering different factors that help explain the problem. The next step is to interrelate these factors into explanatory propositions: Gender discrimination and sexism, biological determinism, and the socialization of males (these three factors may be considered antecedents) all contribute to the ideology that the public relations profession will be hurt -- in terms of salary levels, reputation, respect -- if it becomes all women. Therefore, as the number of men decrease throughout the profession, attempts to recruit and retain them become stronger. These stronger attempts lead to favoritism towards males in terms of salaries, promotions, and benefits. Historical parity, balancing work and family, and women's socialization are added to this, as rationalizations or excuses for supervisors to give lower salaries to women and opportunities for promotions to the few men. The focus on male recruitment and retention then leads to a lack of attention towards young women's needs for skills and knowledge, such as negotiation tactics and assertiveness. Add to this women's socialized assumptions that they should not be aggressive nor demand changes. The result is a feminized field where a predominant number of women remain ghettoized in technical positions with lowered salaries. These propositions and factors can be further refined and empirically tested through future research.

In conclusion, we believe there are differences between women and men, but not based on biological sex, rather based on sex role orientations that predict behavior. However, we believe that there are fewer differences than our societal stereotypes have fostered. Women have attributes and abilities that help their organizations, just as men do. However, perhaps more importantly, there's more variation within than there is between men and women. *Gender* issues arise because society discounts this variation. We argue that women have not been granted variations within their sex and, instead, have been confined to specific traits and expectations. The outcome has been that public relations becomes discussed as a field with "too many women," as if they contribute only so much ability to the public relations field. Hence, the cry for "more men," as if only they can bring missing elements to the public relations practice. Certainly, men bring valuable perspectives to public relations, but the societal position that men are more valued than women devalues public relations women, and devalues the field as a whole.

This study offered several contributions to both the scholarly body of knowledge as well as the professional practice of public relations. On one hand, by using both quantitative and qualitative methodology, the research gave greater breadth as well as depth to the validity of existing gender discrepancies in public relations. More importantly, however, the factors that were highlighted and refined here are the first steps in theory building, moving gender research in public relations from descriptive to explanatory scholarship, and making for rich fodder for future research that can empirically test the theory's propositions. On a practical level, this study went beyond the simple claim that gender discrepancies exist by giving explanations and potential solutions to problems. It offers tools to both women and men in the profession to dismantle the barriers that prevent effective dialogue as well as productive public relations work.

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Table 1: Percentages for gender, ethnicity and education.

Variables	%	N
Gender		853
Male	28.9	
Female	71.1	
Ethnicity		781
White, European American	89.1	
Black, African American	3.3	
Hispanic, Latino	1.9	
Asian, Pacific Islander	.6	
Native American	1.0	
Mixed and other ethnicities	4.1	
Education		853
High school or less	0.0	
Some college	2.7	
Bachelor's degree	64.0	
Master's degree	30.3	
Doctoral degree	3.0	

Table 2: Means for salary, age, and years of experience by gender.

Variables	Mean	N
Salary		
Total	60,935.15	779
Male	73,706.35	216
Female	56,058.56	562
Age		
Total	40	812
Male	45	228
Female	38	583
Years of PR Experience		
Total	13.47	828
Male	17.44	240
Female	11.85	588

Table 3: One-way analysis of variance for hiring perception variables by gender, means and standard deviations.

	Gender				
Variables	Male Means (& SD) (*N* =)	Female Means (& SD) (*N* =)	F	df	significance
Women are more likely to be hired for PR staff positions*					
In YOUR Organization	3.66 (1.60) (*233*)	4.39 (1.64) (*585*)	33.39	816	p < .001
Throughout PR	4.35 (1.32) (*237*)	4.85 (1.27) (*587*)	24.76	822	p < .001
Women are more likely to be hired for PR management*					
In YOUR Organization	3.42 (1.36) (*235*)	3.71 (1.47) (*583*)	6.69	816	p < .05
Throughout PR	3.78 (1.16) (*240*)	3.67 (1.29) (*587*)	1.29	825	ns
If an equally capable woman & man applied for the same job, the woman would be hired*					
In YOUR Organization	3.62 (1.34) (*234*)	3.65 (1.21) (*579*)	.11	811	ns
Throughout PR	3.96 (1.21) (*236*)	3.60 (1.02) (*578*)	18.04	812	p < .001
Women are often hired as a result of affirmative action*					
In YOUR Organization	3.28 (1.58) (*235*)	2.99 (1.43) (*577*)	6.33	810	p < .05
Throughout PR	3.78 (1.36) (*239*)	3.52 (1.26) (*575*)	6.78	812	p < .01

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* Responses were coded: 7=very strongly agree, 6=strongly agree, 5=agree, 4=uncertain/not sure/don't know, 3=disagree, 2=strongly disagree, 1=very strongly disagree

Table 3, continued: One-way analysis of variance for salary, salary perceptions and promotion perceptions by gender.

	Gender				
Variables	Male Means (& SD) (*N* =)	Female Means (& SD) (*N* =)	F	df	significance
Salary	73706.35 (37264.49) *(216)*	56058.56 (31533.61) *(562)*	44.03	776	p < .001
How satisfied are you with your income as a PR practitioner?**	3.50 (.98) *(243)*	3.29 (1.09) *(599)*	6.60	840	p < .05
Women receive lower salaries than men for doing comparable PR work.*					
In YOUR Organization	2.89 (1.50) *(236)*	3.98 (1.87) *(582)*	64.29	816	p < .001
Throughout PR	4.10 (1.41) *(241)*	5.33 (1.29) *(589)*	147.29	828	p < .001
Women in PR management positions are paid less than men in comparable jobs.*					
In YOUR Organization	3.12 (1.39) *(234)*	4.61 (1.68) *(577)*	144.12	809	p < .001
Throughout PR	4.10 (1.13) *(237)*	5.28 (1.18) *(538)*	172.83	813	p < .001
Men are promoted more quickly in most PR employment situations.*					
In YOUR Organization	2.98 (1.32) *(235)*	3.83 (1.58) *(581)*	53.57	814	p < .001
Throughout PR	3.66 (1.19) *(240)*	4.79 (1.27) *(591)*	139.83	829	p < .001
It is more difficult for women to reach the top in PR.*					
In YOUR Organization	3.04 (1.50) *(233)*	4.16 (1.78) *(578)*	71.45	809	p < .001
Throughout PR	3.48 (1.55) *(238)*	4.71 (1.54) *(579)*	105.94	815	p < .001

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* Responses were coded: 7=very strongly agree, 6=strongly agree, 5=agree, 4=uncertain/not sure/don't know, 3=disagree, 2=strongly disagree, 1=very strongly disagree

** Responses were coded: 5=extremely satisfied, 4=satisfied, 3=uncertain/not sure/don't know, 2=dissatisfied, 1=extremely dissatisfied

Table 4. Regression analysis of demographic variables, years of experience, and job interruptions on salary, N = 629.

Independent Variables	Std. beta	R-square change	Total R-square	Adjusted R-square
Education	.05			
Age	.10			
Gender (female=1)	-.07[a]			
Job Interruptions (none = 1)	.08[a]			
Years of Experience	.40[c]	.27[c]	.27[c]	.27

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[a] $p < .05$
[b] $p < .01$
[c] $p < .001$